BRITISH RAINFALL,

1882.

BRITISH RAINFALL, 1882.

ON

THE DISTRIBUTION OF RAIN

OVER THE

BRITISH ISLES,

DURING THE YEAR

1882,

AS OBSERVED AT MORE THAN 2000 STATIONS IN GREAT BRITAIN AND IRELAND,

WITH ARTICLES UPON VARIOUS BRANCHES OF RAINFALL WORK

COMPILED BY

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ERRATA IN BRITISH RAINFALL, 1881.

Page 23.—Table III. Boston, 1840–9 for 24·581 *read* 24·481, and 1830–79 for 22·683 *read* 22·658.

,, 24.—Boston, 1845 for 25·29 *read* 24·29.

,, 25.—Boston, 1845 for 111 *read* 107, and mean for year for 97 *read* 96.

,, 28.—Nash Mills—Ratio for 1862–4 for 38 *read* 83.

,, 32.—Last line but one of table for 1830–9 *read* 1830–79.

,, 64.—Second line—omit Tarbetness.

,, 64.—Last line of table for May—September, *read* July—September.

,, [3].—11th, Heighington, for XI. *read* X.

,, [16].—July 28th, Babbacombe, for 41°·2 *read* 46°·0, and for 33°·4 *read* 34°·1.

,, [86].—Neston for 3·70 in. *read* 3·70 per cent.

,, [90].—Jersey, St. Aubin's, first line for seven *read* six.

,, [138].—1st line for Rev. O. Philpott *read* O. Philpott, Esq.

,, [139].—Stevenage for 202 days *read* 170.

,, [147].—Torrington (Stevenstone) for 44·42 *read* 39·77.

,, [154].—6th line Ferriby Sluice for 25·97 *read* 27·56.

,, [154].—Bacup (Calf Hey). This station had been incorrectly described, *it should be* Haslingden (Calf Hey).

,, [174].—*Omit* Greenock return—it was duplicate of the one above it.

,, [179].—Shetland, Stourhead. This return is misplaced; it is from Stourhead on the S.W. coast of Sutherland, not from Stourhead on the Island of Papa Stour, Shetland.

ERRATA IN BRITISH RAINFALL, 1882.

Since printing the large folding table which faces page 22, an error has been detected in the Kendal return for 1881, and the value for that station should be changed from 59·51 to 59·82; there is also a misprint of 48·71 instead of 40·71 for station No. 11 in 1882. As this was right in the manuscript it does not affect any of the results.

Page [27].—December 7th, Melrose. The depth of snow was 27 inches, not ·27 in.

Page [141].—Line 10, *omit* the word Hemelhempstead.

PREFACE.

RAINFALL work is perhaps in most respects as good a specimen of development as could easily be found. We began with four pages, we now require nearly 300. We began with 168 records, we now have over 2000. We began by asking our observers for only the total rainfall in each month, we now invite, receive, and check every daily entry from more than a thousand stations. We began by printing only the totals for the individual year, we now chronicle the details down even to periods of only 5 minutes. We began with a feeble reference to the fall in the previous ten years, we now not merely compare the past year with twenty previous years, at upwards of 170 different stations, but in a separate article in the present volume, we carry the comparison back for more than a century and a half. We began by bearing the whole cost, as well as the whole labour of the work, we have long had to accept the financial assistance of our observers, and have had for many years the valued help of an able assistant, besides that of one permanent and other occasional clerks. However long may appear the list of subscribers on pages 13 to 16, it may be permitted to remark that it contains only 317 names as compared with our 2500 stations. As we have pointed out elsewhere, there is much useful work which could be put in hand, were the necessary funds available.

It may be asked, "Why this elaborate chronicle of growth?" The answer lies in the corner of this page—in the date of June 30th. None but those who act up to the belief that the first essential of a statistical work is, that it be accurate, would credit the labour that the prepartion of this volume now entails, the strain which it involves until it is finished, or the relief with which the Editor sees the proof of the last sheet.

G. J. SYMONS.

62, CAMDEN SQUARE, N.W.
June 30th, 1883.

REPORT.

Search for Additional Observers.—It is only by considerable vigilance that any voluntary staff can be kept in perfect efficiency. Death and removals thin our ranks, and both observations and subscriptions would fall short if watchful care were not exercised. We showed last year (page 67) that the observers in Scotland had decreased by one-sixth between 1877 and 1881, from 369 to 313, and by an almost identical percentage of loss in each successive year. This was too serious a matter to be permitted to continue, and I therefore resolved to try and ascertain whether there existed any considerable number of observers unacquainted with the existing organization and willing to join it. The editors of the metropolitan and provincial journals have always been ready to help the "national work" upon which I have so long been engaged; feeling therefore certain that they would again help, I forwarded, in December 1882, to about 200 of the principal journals the following letter:—

"BRITISH RAINFALL.

"*To the Editor of* . . . . .

"SIR,—I am just preparing to issue to all the observers of rainfall known to me, blank forms for the entry of their records for the year shortly about to close. This staff now exceeds 2000, but still (as they are not unfrequently rather clustered) there are many parts of the country where additional records are needed.

"I have no doubt that records are already kept in many places unknown to me, and I shall be glad if you will allow me to invite communications from any one who has kept an accurate record, and to supply either those already observing or contemplating doing so with a copy of the rules adopted by British observers, and with all necessary blank forms. All, I may perhaps as well add, free of charge, as our greatest requirements are *ample* and *accurate* records.

"Your obedient servant,

"G. J. SYMONS, F.R.S.

"62, Camden Square,
"London, N.W."

My expectations as to the action of the editors were amply fulfilled for though probably I do not know of all who inserted it, I know of

so many who did, that the collective number of copies printed must have been several millions. This word is sometimes used vaguely but I am not in the habit of using words unless they are literally true. The London daily papers which contained it exceeded one million, and it was also in many of the weekly metropolitan papers, some of them with an enormous circulation, and in the provinces also, some of the papers in which I saw it have an extremely large circulation, such as the *Birmingham Daily Post*, *the Sheffield Daily Telegraph*, *the Western Morning News*, *the Glasgow Herald*, *the Belfast News Letter*, &c. I must not fill this page with names, but take this opportunity of thanking my brother editors for their help.

Now for the result. Generally, I form a notion beforehand of what the result of any given action will be, but in this case I could not tell what to expect, because there were no means of knowing how nearly all existing observers had, either by the help of present correspondents or through previous publications, been brought into communication with me. In two respects the result has been very satisfactory. Several long-established records have been forwarded, among them the following:—

Town Hill Tanks, Hamilton, Lanarkshire ...	1858 to 1882
Annesley Park, Nottingham	1864 to 1882
Barford Rectory, Warwick	1868 to 1882

There has also been, as will be fully shown in the section of the work devoted to "the staff of observers," a very considerable addition to the list of English observers. But from Scotland we have not a score of fresh records, and the only consolation is that, while the number is extremely small, many of them are in localities of great importance; for instance, we print this year a record (and it extends back to 1877) from the Isle of Jura, where hitherto we have had only a lighthouse station. We have also a record, nearly perfect (and going on steadily) from the Isle of Coll, the first from that island. I also had an application from, and presented a gauge to, a new station at Voe, Shetland, so that, on the whole, the effort has been distinctly beneficial as regards Scotland. But both in Scotland and in Ireland much remains to be done, and I should be very glad to see in them something analogous to the local energy displayed in Essex, Norfolk, and Wiltshire. It is too often forgotten how relatively large Scotland and Ireland are, together larger than England and Wales. To assist in checking that oversight I add the relative sizes, and also the

number of square miles to a station, in each country (taking the 1881 numbers) :—

Countries.	British Isles.	England.	Wales.	Scotland.	Ireland.
Area in miles.....	119,925	50,387	7,425	29,600	32,513
Relative Size.....	100	42	6	25	27
Stations	2155	1548	141	313	153
Square miles to each station.....	56	33	53	94	212

Hence as regards number of stations Ireland is by far the most deficient, but some circumstances must not be forgotten. Owing to the (generally) less hilly surface of Ireland, the rainfall is more uniform, and therefore fewer stations are needed than in Scotland, secondly, while Scotland between 1871 and 1881 increased its number of stations by only *two*, in Ireland they were more than doubled; they were increased from 67 to 153. Lastly, it must be remembered that of the 313 stations quoted from Scotland, 42 are from lighthouses, from many of which the records are of uncertain value. These facts are, however, of only partial and indirect importance; the total number of stations is quite subsidiary to (1) good geographical distribution ; (2) the maintenance in various parts of the country of registers extending over very long series of years. Both these matters will be considered elsewhere, and therefore we need not here further pursue the subject.

Monthly and Seasonal Rainfall.—In April, 1880, an arrangement was made between the late (and universally regretted) Prof. H. J. S. Smith, F.R.S. (chairman of the Meteorological Council), and myself, whereby I undertook to supply tables containing the total rainfall of each month of each of the fifteen years, 1866-80, at all the stations in the British Isles of which the returns would be useful for determining the laws of seasonal distribution. It was arranged that these tables, together with certain mean values, should be delivered on July 1st, 1881. There proved to be 366 stations from which the requisite data were available, and therefore the MS. contained more than 100,000 entries, and about 400,000 figures, but heavy as the work became, it was completed and delivered on the date originally specified, July 1st, 1881. The Meteorological Council then had to consider questions of type, &c., before the printing could be commenced, and subsequently the setting up of so many thousand types

and the reading of the proofs occupied until June, 1882. The Council added a preface, a map showing the sites of the stations, and two indices, making altogether a work which I hope will be considered by all, as it is by many, creditable to both parties.

Of course the work is as yet only half done. We have in this book the best obtainable materials for an examination of the monthly and seasonal distribution of British Rainfall, which up to the present time has only been attacked (and with inferior materials) in *British Rainfall*, 1867, and in the *Report of the British Association*, 1868. The observations have been collected; the lesson which they teach has yet to be learned.

Days with Rain.—One of our observers has, upon the back of his return, asked a question which we print, and reply to, in this place, because the same fact may have puzzled others. A reply to one will be a reply to all, and may lead to increased care on the part of those observers whose records of the number of days with rain have been, like those of our correspondent, suppressed.

The question runs:—"How is it that in some cases the number of days on which ·01 in. fell is omitted in the published tables, although a daily return and abstract has been sent in?"

Inasmuch as every editor prefers seeing his pages complete and uniform, the first and obvious reply is that the figures would not be left out unless I felt certain that they were wrong.

Those of our readers whose memory goes back to the early years of rainfall work (1860–65), will remember in what hopeless confusion we found the definition, and consequently the records, of "rainy days." Those who do *not* remember it, and care to see out of what a chaos the present rule of "·01 in. fell" was evolved, should read pages 9-11 of *British Rainfall*, 1863.

Matters are vastly better now, but still the carelessness of some observers in omitting to visit their rain gauges *every day*, wet or dry, leads to a lot of trouble. Another, but much less frequent source of error is in the use of old-fashioned rain gauges of too coarse a construction to show ·01 inch. From one or other of these sources nearly all the errors arise.

Familiarity with the appearance of a daily register of rain enables us at a glance to say whether it has been carefully kept or not. But as some persons might object to a mere *ex cathedrâ* statement, we will give numerical proof which will, we hope, leave the matter beyond all question or dispute.

In *British Rainfall*, 1867, pages 22–28, will be found an article entitled "On how many days in the year will half an inch of rain fall?" In that article are tables giving analyses of 69 daily rain registers, which prove that of all the measured daily falls 48 per cent. are less than 0·10 in., and 52 per cent. are above that amount. This may for all ordinary purposes be expressed as follows :—

"*There are as many days in the year on which the rainfall is below* ·10 *in. as there are on which it exceeds that amount.*"

We have just taken a daily register which looked well kept, and we find days under ·10 = 89, above ·10 = 97, ; another gave 91 and 97, and evidently that is about the usual proportion, except in extremely wet localities, where the small quantities are more rare.

The register which has elicited this discussion gives :—Under ·10 = 30, above ·10 = 68 ; hence it is certain that on many occasions small amounts have not been measured, but have been left in the gauge to augment subsequent measurements. This is confirmed by another fact. In well-kept records there are seldom fewer than twenty days with entries of ·01 in. ; in the record from the station under discussion there is *only one* such entry.

It must not be supposed that this is a solitary case—there are perhaps 20 or 30 stations whence the records of the number of "days with ·01 in." are so self-evidently wrong, that I decline to print them, and there are a far larger number which I do print, but to the accuracy of which I refuse to pledge myself. I have said over and over again that in most cases the number of "days with ·01 in." is rather an indication of the carefulness of the observer than of the climate of the locality.

Where complete records of pressure, temperature, &c., are kept, the observer is obliged to visit the instruments each morning, it becomes part of the routine to look into the rain gauge, and small amounts are duly measured and recorded.

If the observer has only a rain gauge, there is a tendency to save trouble by mentally deciding that there is nothing to measure, and so avoiding the walk of say 50 yards to and from the gauge ; but the end of such a practice inevitably is, that the total number of entries of ·01 in. proves at the end of the year ten or a dozen too few ; and then comes an enquiry if I can explain why, in 1881, two observers whose gardens join, differed by 13 in their number of "days with rain," or a note like the following, which arrived early last year :—

"It is surprising what great differences there are in the column in

British Rainfall, headed "Days on which ·01 or more fell." Taking the record for 1880, I find, for example, only two-thirds as many at Seaham as at Sunderland, only 5 miles off; though the fall was least at the latter. Then at Hartlepool, one station has double the number of rainy days that the other two have."

Rain gauges are now so well made that the loss by evaporation is extremely small, and, therefore, neglect of the kind I have been describing, has no appreciable effect upon the monthly or yearly totals, and therefore I regard it with comparative equanimity, but of course it would be much better that the column headed "Days on which 0·01 in. or more fell" should be as correct as the rest of the work.

Finance.—There is nothing to call for special notice in this respect, at any rate there is no progress to report, old subscribers continue their help, some have increased it, and some names appear in the following list for the first time, but only as many as have disappeared owing to death and other causes. While the income is stationary, it is obvious that the expenditure ought to be kept nearly similar; hence several important developments will have to remain in abeyance, and we must be contented with maintaining the present arrangements as efficiently as possible.

LIST OF ALL SUMS OF £1 AND UPWARDS RECEIVED IN PAYMENT FOR BOOKS, DIAGRAMS, &c., OR AS CONTRIBUTIONS TO THE GENERAL EXPENSES OF RAINFALL INVESTIGATIONS IN 1883.

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Lynill, J. P. Esq.	1	7	6
Mace, J. E., Esq.	2	0	0
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Macfie, R., Esq.	3	0	0
Mackeson, H. B., Esq.	1	5	0
MacLaren, Mr. J. B. (2 years)	1	0	0
Mahony, R. J., Esq.	1	10	0
Mansell, Mrs.	1	0	0
Markham, C. A. Esq.	1	0	0
Marshall, A., Esq.	5	0	0
„ H. C., Esq.	5	0	0
Marson, J., Esq.	2	2	0
Marten, E. B., Esq., C.E.	1	12	0
Massie, Rev. E.	1	1	0
Massie, R., Esq.	1	5	0
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Matthews, J., Esq.	1	6	0
Maw, G. Esq.	1	0	0
Mawley, E., Esq.	2	0	0
Maxwell, Rev. E.	1	11	0
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Melville, A. S. L., Esq.	1	1	0
Metcalfe, Miss	1	1	0
Milnes, E., Esq.	1	0	0
Mitchell, F. J., Esq.	1	1	0
Moore, Dr. J. W.	1	0	0
Morrison, W. Esq.	2	0	0
Mostyn, C. Esq.	1	1	0
Muirhead, H., Esq., M.D.	1	1	0
Musgrave, W., Esq.	1	1	0
Nash, Mr. W. R.	1	1	0
Neame, E., Esq.	1	0	0
Neumann, H., Esq.	1	5	0
Newnham, Rev. P. H.	1	0	0
North, A., Esq.	1	1	0
Nutter, J., Esq.	1	11	0
Ormerod, G. W., Esq.	1	0	0
„ Miss E. A.	3	0	0
Owston, Rev. T.	1	0	0
Paget, J., Esq.	1	6	0
Palmer, A., Esq.	1	11	0
Parker, Rev. Dr.	1	7	6
Parkin, A., Esq.	1	5	0
Parnell, J., Esq.	2	0	0
Pasley, Admiral Sir T. S., Bt.	1	13	0
Paulin, W. T. Esq.	2	15	0
Payne, G. Junr., Esq.	1	1	0
Peake, R. W., Esq.	1	1	0
Pearson, F. F., Esq.	1	1	0
Peckover, A., Esq.	1	1	0
Pennant, P. P., Esq.	1	0	0
Phillips, E. P., Esq.	1	5	0
„ G., Esq.	1	0	0
Philpott, O. Esq.	1	0	0
Phipps, P. Esq., M.P.	1	6	0
Pleydell, J. C. Mansel, Esq.	1	0	0
Preston, Rev. T. A.	5	0	0
Prince, C. L., Esq.	1	1	0
Rankin, J. Esq., M.P.	2	0	0
Reade, T. M., Esq., C.E.	1	12	0
Rendell, Rev. A. M.	1	0	0
Rendlesham, Rt. Hon. Lord, M.P	5	0	0
Reynolds, J. Esq.	1	1	0
Reynolds, L. W. Esq.	1	1	0
Ridout, Rev. G.	1	2	6
Rigby, J., Esq.	1	1	0
Roberts, I., Esq.	1	6	0
Robertson, H., Esq., M.P.	2	7	6
Robinson, J., Esq.	1	0	0
Robson, J. W., Esq.	1	5	0
Rogers, A. S. Esq.	1	1	0
Ross, Rev. J. C.	1	5	6
Row, W. N. Esq.	1	1	0
Rylands, T. G., Esq.	1	1	0
Ryves, Rev. G. T.	1	0	0
Saunder, S. A. Esq.	1	0	0
Scott, J. W., Esq.	1	1	0
„ Mrs. Russell	2	2	0
Selby, B. P., Esq.	1	0	0
Shackleton, J., Esq.	1	1	0
Sharples, G., Esq.	1	0	0
Shelford, W., Esq., C.E.	1	1	0
Shiffner, Miss	1	0	0
Shouldham, Colonel	1	0	0
Sidebottom, Rev. T. W.	1	10	0
Sidebotham, J., Esq.	1	0	0
Slade, F., Esq., C.E.	1	1	0
Smith, Cecil, Esq.	2	0	0
„ Harold, Esq.	2	2	0
Smyth, J., Jun., Esq., C.E.	1	10	0
Soames, Rev. C.	1	5	0
Southall, J., Esq.	1	1	0
„ H., Esq.	1	0	0
„ N., Esq.	1	0	0
Spence, R., Esq.	1	1	0
Squire, W., Esq.	1	10	0
Stanton, Miss R.	1	0	0
Stewart, M. J., Esq.	1	1	0
Stone, W. H., Esq.	1	10	0
Stuart, Col.	1	10	0
Stubs, P., Esq.	1	1	0
Swindells, R., Esq., C.E.	1	0	0
Sykes, Dr.	1	0	0
Tatton, T. Egerton Esq.	1	1	0
Taylor, F., Esq.	2	0	0
„ Rev. H.	2	0	0

	£	s.	d.
Tippinge, F. G., Esq.	1	1	0
Tucker, H., Esq.	1	10	0
Tuckett, F. F., Esq.	1	10	0
Turner, F. J. Esq.	1	0	0
Tyndall, W. H., Esq.	1	1	0
Vibert, J. E., Esq.	1	2	6
Walker, A. O., Esq.	1	0	0
,, J. D., Esq.	1	11	0
Wainwright, B. C. Esq.	2	7	0
Ward, H., Esq.	1	11	6
Ward, H. D. A. Esq.	1	5	0
Wardale, Rev. J.	1	0	0
Waring, Colonel	1	0	0
Watkins, Mr. H.	1	0	0
,, J., Esq.	2	15	6
Wells, L. B., Esq., C.E.	1	6	0
Wheatley, T. E., Esq.	1	1	0
Whitten, J. S., Esq.	1	0	0
Wigram, J. R., Esq.	1	0	0
Wildgoose, R. W. Esq.	1	11	9
Wilkin, F., Esq.	1	2	0
Williams, Rev. W. W.	1	0	0
Wilson, G. S., Esq.	1	0	0
,, J., Esq., C.E.	1	1	0
,, Thomas, Esq.	1	10	0
Wingfield, Rev. C. L.	1	0	0
Woodhouse, A. J., Esq.	2	0	0
Wolseley, Dr. C.B.	1	0	0
Woollams, Mrs.	1	6	0
Woollett, G. C., Esq.	1	0	0
Wortham, H., Esq.	1	10	0
Wright, P. Esq.	1	10	6
Yool, H., Esq.	2	2	9
Young, W. B., Esq.	1	5	0
Young, Colonel Grant	1	14	9

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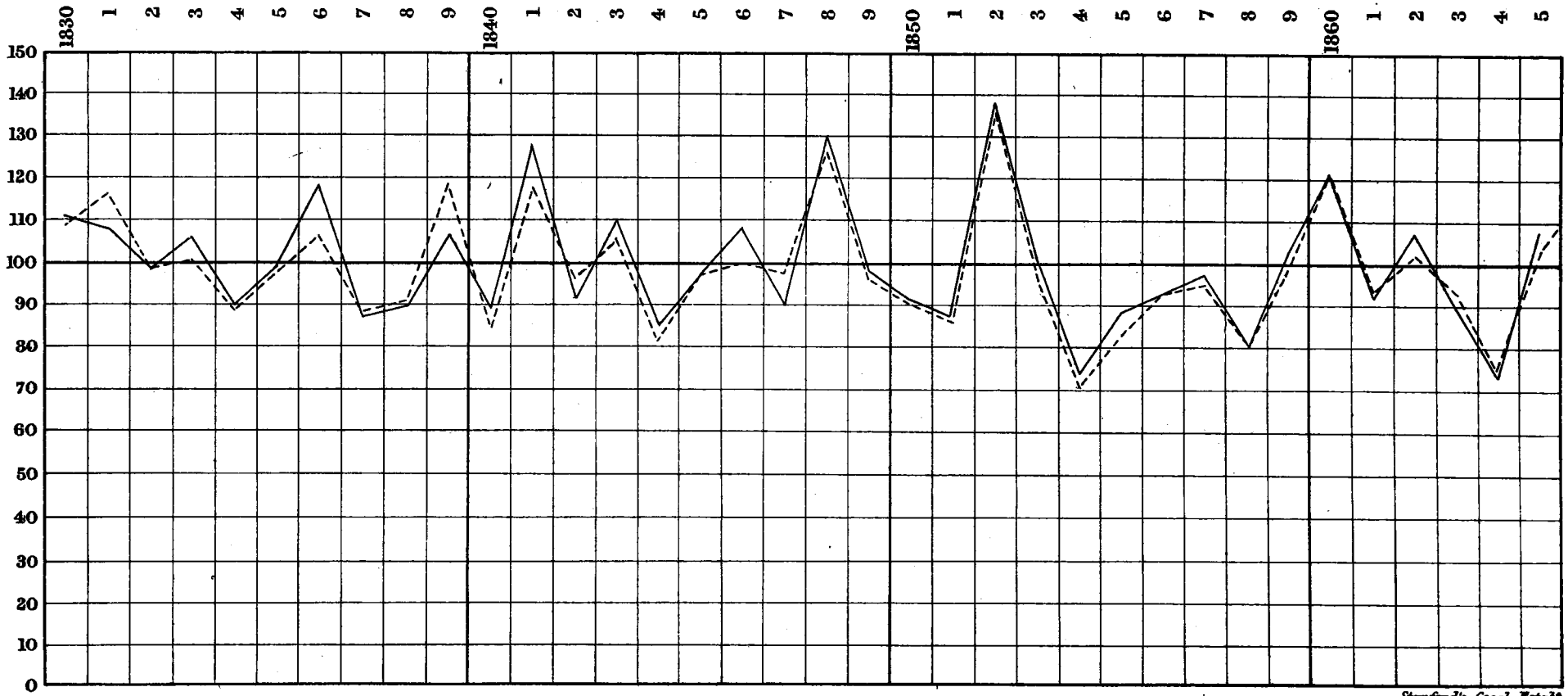
FLUCTUATION OF ANNUAL RAINFALL, 1830-65.

As computed from two different sets of observations.



Values in Brit: Assoc: Report, 1866 thus ———

Values in Britt: Rain: 1881 page 25, thus- - - - - - -

ON THE WETNESS OF RECENT YEARS IN VARIOUS PARTS OF THE BRITISH ISLES.

In *British Rainfall*, 1881, I discussed very fully the records from nine stations during the fifty-two consecutive years (1830-81), and compared the results obtained from the data there given, with those afforded by several previous investigations.

As 1882 proved to be a wet year, the *eighth* in immediate succession, whereas during at least 155 years there have never before been even six successive wet years, and as this continued excess is proving seriously prejudicial to agricultural interests, I purpose on the present occasion ascertaining whether this excess has, or has not, prevailed equally over the whole country.

Before attacking this question, I give an addendum or postscript to last year's article, for since it was printed, I have found (greatly to my satisfaction) that the values in the last column of page 25—that is to say the relative wetness assigned to each year—agree remarkably (for the 36 years common to both) with the values in the corresponding column of the folding table facing p. 286 in the *British Association Report*, 1866. Instead of leaving my readers to verify this for themselves, or to take it upon trust, I annex a diagram of the two sets of values, the continuous line representing those published in 1867, and the dotted one those published last year. It will be found that not only is there obvious general accordance, but that in no year since 1847 do they differ more than 5 per cent. ; that out of the 34 years, 10 agree either absolutely or within 1 per cent., and that their mean difference is also very little more than 1 per cent.

This result is satisfactory not only as confirming the general accuracy of the inferences drawn last year, but it is of especial value as proving that the values in Table II., p. 25 of *British Rainfall*, 1881, may be regarded, as for all practical purposes, a legitimate continuation of the table in the *British Association Report*. I use the expression "for all practical purposes," because rainfall work proves capable of such accuracy that a variation of $1\frac{1}{2}$ per cent. ought not to be ignored, and that is the difference between the two sets of values for 1830-65. It is a variation, not an error, and it arises from the raising of the mean value by the series of seven wet years with which Table II. (*British Rainfall*, 1881) concludes.

There is no advantage in loading these pages with tables, and therefore we refer those of our readers who desire the precise figures to the already quoted sources, and pass on to explain briefly the diagram which represents them.

The last column of the table in the *British Association Report* gave the relative rainfall of every year from 1726 to 1865 both inclusive, the frontispiece to this volume represents those values, but is continued onwards by those given in *British Rainfall*, 1881, with the further addition of the value for 1882 (124) obtained as follows :—

Station.	Chilgrove.	Nash Mills.	Oxford.	Exeter.	Orleton.	Pode Hole.	Boston.	Bolton.	Kendal.	Mean.
Rainfall ...	35·71	35·22	30·00	38·98	40·71	30·50	30·18	54·07	59·82	—
Ratio	106	132	128	128	136	119	113	114	116	124

In case this diagram should come into the hands of anyone not familiar with this mode of representing rainfall, we add a brief explanatory note.

The average rainfall for the period 1815–65, is taken as the basis of the diagram, and is represented by 100. Therefore, upon the diagram, every column which extends above the thick 100 line, represents a wet year, and the excess above the 100 line shows the amount of excess—thus, in the first year, 1726, the column reaches nearly to 110—actually to 109—and shows that the rainfall in that year was 9 per cent. above the average. Of course, in dry years, the column is shorter, and falls short of the 100, or average line, just as much as the rainfall itself fell short.

Thus we arrive at a graphic representation of the relative fall of rain over the middle of England in each of 157 consecutive years, as compared with the average of the 51 years (1815-65). It possesses two salient features: (1), the long and severe drought which may be said to have prevailed from 1728 to 1763, and which dwarfs every other drought, even that of 1853-58, into a mere nothing; (2) the wet period which has extended from 1874 to the present time, and which is also without parallel.

It will be obvious that this diagram gives almost (if not absolutely) unequalled materials for the verification of theories as to periodicity —either of sunspots or of anything else. For instance the dryness of all recent years ending with 4 comes out clearly in 1874, 1864, 1854, 1844, 1834, 1814, 1804, 1784, 1754, 1744, while the only years ending with 4 and having the average or more than the average fall were 1734, 1764, 1774, 1794, and 1824—giving ten instances of deficiency against 5 of excess, and as regards the present century, giving 7 of deficiency and only 1 of excess.

Another fact to which I drew attention many years ago was the wetness of each 12th year, of which 1860 was then the last. Since that time we have had 1872, and if we look along the frontispiece we shall find the rule supported by 1872, 1860, 1848, 1836, 1824, 1776, 1764, 1728, and contradicted by 1740, 1752, 1788, 1800, and 1812; there are thus eight in excess and five in defect. But with this rule, as with the previous one, the recent results are much more favourable than the old ones.

	Years ending with 4.			12th years from 1860.	
1726 to 1799	Dry 3	Wet 4	.....	Dry 3	Wet 3
1800 to 1882	Dry 7	Wet 1	.....	Dry 2	Wet 5
Total	Dry 10	Wet 5	.....	Dry 5	Wet 8

The rule of 12th years has recently been rediscovered by a gentleman, who has made it the basis of a long letter published in the *Globe*, wherein he ascribes their wetness to the influence of the planet Jupiter, and indulges in fascinating dreams of the details of coming rainfall which he will be able to predict. Of course it looks very bad for the 12th year theory, that it does not hold in the 18th century, but a very slight correction will carry it fairly well through that century. It is shown above, that it holds back to 1824, fails slightly (only by 3 per cent.) in 1812, and then fails, time after time —suppose that the period differs from 12 years by a month or so, that would be cumulative, and so 1824 should be the least excess (which it was), 1812 should be slightly wrong and earlier years still worse. Assume that the error has amounted to a year, start again with 1799 instead of 1800, then the wet years should be those in the following line; the actual facts are added below, and give five favourable results against two adverse ones:—

1799	1787	1775	1763	1751	1739	1727
Wet.	Dry.	Wet.	Wet.	Wet.	Dry.	Wet.

We leave others to prove that all these are mere coincidences.

Inasmuch as there has been a rapid increase in the number of localities at which the fall of rain has been measured, it is obvious that the shorter the records required the more numerous will be those available. For the present investigation it is of the utmost importance to determine the fluctuation of rainfall, *i. e.* the sequence of wet and dry years, at the largest possible number of widely scattered stations. If the only problem before us was to determine the area over which, and the extent to which, the recent excess has prevailed, registers consecutive for 25 years would suffice, and of

such records I probably possess 200. There are, however, other questions of considerable importance which ought to be dealt with; there is at present no knowledge whatever as to the relative fluctuation of rainfall in different parts of the British Isles—either as to time or quantity;—we do not know, for instance, whether the drought of 1853-59, which is the distinguishing feature of nearly every English record, is equally or more strongly marked in Scotland and Ireland. We do not know whether the (approximate) English rule that "the fall in the wettest year is rather more than twice that in the driest" holds good for the sister countries, or to what extent and in what direction it is modified.

For the solution of these questions, long registers are indispensable, I do not think that any which extend over less than forty years can (without very elaborate calculation) be employed, continuous records commenced in 1840 and continued to the present time, are not numerous in England, there is not one in Wales, and (with the exception of the Scottish Lighthouse records) there are very few either in Scotland or Ireland.

I have no desire to complain of this paucity of material; on the contrary, it seems to me that we may fairly congratulate ourselves on being able to produce 45 registers extending (in many cases without a single interpolation) over a synchronous period of 43 consecutive years. But at the same time I would call attention to the weakening of the present investigation which arises from the absence of public recognition of the importance—the supreme importance—of *continuity* in meteorological work. For instance, a record of rainfall was begun at Chatsworth in 1760, and continued to 1813, thus giving us one of our longest records, but then the record ceased, and it is only within the last 10 or 20 years that observations have been resumed; the gap of fifty years between the two series cuts them utterly asunder, but had the record run from 1760 to the present time its utility would have been very great. I have in my Presidential address to the Meteorological Society (1882), strongly urged the establishment and endowment of stations for the purpose of studying secular changes, and as this volume may fall into the hands of some who are not Fellows of the Meteorological Society, I reprint the paragraph:—

"With reference both to second order and to climatological stations, there are several grounds upon which the maintenance of numbers of stations in excess of all apparent requirements can be justified. The chief is the constant difficulty which arises from the removals and deaths of the observers,

and from the extension of buildings, the growth of trees, &c. This renders it necessary to have two or three stations wherever we desire to make sure of a continuous record. But a far better and more scientific plan would be to choose a few unexceptional localities remote from towns, to purchase the freehold of a few surrounding acres, erect thereon stations identical in every respect, and endow them with moderate funds, so that humanly speaking the observations may be established on a perpetual and unalterable basis. Some persons may think that I have forgotten the seven observatories of the Meteorological Council, and that they fulfil the above requirements. Those observatories have doubtless yielded valuable information, but they hardly fulfil one of my conditions. Some are in the open country, some in the heart of towns, few are in the centre of freehold land, the buildings are by no means uniform, and instead of possessing endowments they all depend on that shifting sand—a parliamentary vote. Other persons may say that the scheme is Utopian. I do not think so. Mr. Gassiot gave £10,000 to endow Kew, and looking at the enormous sums now waiting for worthy objects, looking at such gifts as that of Sir Josiah Mason, and many others, I see no reason why some like-minded man should not resolve upon so building and endowing half a dozen first order Meteorological Observatories, that they may go on without modification for centuries. That would be the way to study secular changes."

I am extremely glad to find that this principle has been thoroughly adopted and carried out by the widow of one of my oldest correspondents—Arthur Forbes, of Culloden—as will be seen from the following extract from the report of the Council of the Scottish Meteorological Society, March, 1882 :—

"As regards the station at Inverness, at which the instruments have been furnished by Mrs. Forbes, of Culloden, in memory of her late husband, at an expense of upwards of £100, the Council has learned with much pleasure that, in order to maintain this station in its present efficient condition, Mrs. Forbes, widow of the late Mr. Forbes, of Culloden, who did so much for Scottish Meteorology, has handed over to three gentlemen, as trustees, the sum of £200, the interest of which is to be expended in maintaining the station, the trustees being Mr. Duncan Forbes, of Culloden, Provost Fraser, of Inverness, and Mr. Innes, Chairman of the School Board. The Council have the greater pleasure in recording this handsome donation on the part of Mrs. Forbes, inasmuch as it secures the unbroken continuance of observations at one particular station, a consideration of the utmost importance as regards all questions affecting secular changes of weather."

I leave this digression, hoping that it may lead to action on the part of some of the many persons who if they will take only a little trouble can ensure long continued observations.

I have hesitated considerably with respect to two points concerning the accompanying folding table. I hesitated about printing it at all, because of the cost of setting up such a mass of figures, and I hesi-

tated still longer as to the details which should be given respecting its construction. It is needless to say, that the first point was decided in the affirmative. As regards the second, I purpose stating the general principles, and not entering upon the details.

It may at first be supposed that the table is merely a transcript of certain columns from our record books, but it is much more than that. On examination it will be found that a few entries (perhaps 50 out of 1,935) are, like the very first, (*18 24* at Greenwich in 1840), printed in italics. These figures have given great trouble, because they are computed values, or at any rate, are not from the same gauge as the rest of the record. At Greenwich the indisputable record begins with 1841 ; the value for 1840 is from another gauge. But generally, it has been necessary to calculate from surrounding stations what the fall must most probably have been, and as there have been rarely less than four, and often six or seven surrounding stations employed in order to determine the most probable value for each individual italic entry, it will be obvious that this process repeated for about fifty entries, has been no trifle.

However, the table is finished ; doubtless it is not perfect ; some of the gauges treated as continuous are not absolutely so. It is not everyone who can hope to observe the same gauge, in the same spot, for 43 consecutive years, and, therefore, some changes have been passed over, but, to the best of my belief, none of serious extent ; without unreasonable delay, I cannot make it any better, and it now only remains to see what it teaches us.

Before discussing the results, it is, however, essential to give a few particulars respecting the stations. This will be most conveniently done by putting the information into a table, in which the returns are arranged in the order of the reference numbers printed at the head of each column in the large folding table.

TOTAL RAINFALL IN EACH YEAR FROM 1840 TO 1882, BOTH INCLUSIVE, AT 45 STATIONS IN THE BRITISH ISLES.

Year.	Greenwich.	Chilgrove.	Uckfield.	Ventnor.	Nash Mills.	Oxford.	Aldhorp.	Tavistock.	Exeter Inst.	Truro R. Inst	Orleton.	Pode Hole.	Boston.	Bolton.	Belmont.	Coniston.	Bedmires.	Holbeck.	Middleton.	Keswick P. Office.	Kendal.	Guernsey.	Mull of Galloway.	Cornwall.	Glencorse.	Inveresk.	Fladda.	Rothesay.	Mull of Kintyre.	Stonefield.	Rhinns of Islay.	Dollar.	Loch Leven.	Arbroath.	The Burn.	Girdleness.	Buchanness.	Bawsebank.	Culloden.	Cape Wrath.	Sandwick.	Cork Ry. Inst.	Portlaw.	Inistioge.	Mackree.	Year.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
1840	*18·24*	28·90	*22·30*	20·72	21·44	18·42	*19·30*	39·20	22·76	31·66	25·80	21·30	18·61	45·03	*64·00*	69·60	40·87	*23·60*	24·57	*57·20*	48·21	*28·50*	25·27	32·19	36·71	24·84	40·26	51·50	37·34	58·45	31·53	40·30	*31·00*	*25·10*	*34·00*	23·18	26·12	32·56	*23·10*	40·58	*36·50*	25·44	*33·90*	*36·00*	30·77	1840
41	33·26	43·35	*36·30*	26·68	32·10	31·26	*26·10*	64·70	36·46	60·12	32·77	29·45	27·26	53·87	*77·30*	76·20	46·34	*25·00*	25·73	*69·00*	53·85	*36·90*	28·21	46·61	38·51	27·38	46·41	65·90	51·38	61·10	36·16	41·87	*30·20*	*29·00*	*39·00*	24·42	29·53	32·89	29·22	37·43	39·98	38·78	50·10	*48·00*	35·55	41
42	22·57	29·80	*24·60*	18·97	26·43	21·64	23·19	53·05	27·70	37·83	25·48	32·10	24·73	38·63	*55·00*	65·20	33·78	17·85	20·28	46·10	48·09	*29·00*	26·79	40·59	25·68	17·88	29·85	40·80	40·90	59·72	32·49	35·69	27·60	*24·40*	*33·10*	24·56	21·56	30·04	23·69	35·68	36·92	30·84	45·80	*45·00*	33·26	42
43	24·47	34·61	30·09	26·94	26·47	24·20	24·86	54·50	33·24	41·79	29·94	29·45	24·29	49·40	63·40	75·90	43·65	23·90	24·14	59·66	56·31	37·71	20·03	39·53	33·34	23·31	46·67	48·00	46·28	66·20	39·17	42·93	35·20	*26·20*	33·70	23·18	26·02	27·78	22·88	39·16	38·44	33·84	42·90	38·88	35·95	43
44	23·20	28·26	23·37	23·38	23·57	17·80	18·84	42·55	23·79	39·37	21·73	22·20	21·64	34·63	50·00	60·20	30·15	16·30	19·05	40·68	43·01	27·65	12·97	32·77	30·13	21·82	34·88	39·10	35·44	55·50	25·76	40·76	29·30	26·38	34·70	19·20	27·27	24·68	23·79	38·02	32·08	33·48	43·55	40·54	33·63	44
45	22·34	30·68	23·03	21·49	24·53	21·41	20·68	51·00	25·34	39·47	27·41	27·25	24·29	48·11	55·00	79·10	45·35	24·75	30·35	62·20	53·35	33·33	17·67	44·80	39·53	32·39	45·02	52·45	44·92	77·30	35·49	51·08	42·90	28·21	37·00	24·48	30·50	30·42	27·63	45·24	40·94	32·78	39·80	42·00	40·37	45
46	25·29	34·55	25·11	30·48	26·55	25·86	23·74	58·15	30·80	40·33	27·02	26·10	23·40	40·82	49·80	80·00	39·71	23·90	26·65	67·68	52·37	42·57	18·29	46·88	40·25	36·56	44·23	54·00	50·39	64·75	35·50	49·88	42·80	29·57	44·70	26·07	28·42	30·45	28·30	34·51	33·05	52·55	49·85	52·12	37·56	46
47	17·61	26·03	17·58	20·65	23·20	22·15	20·68	60·20	30·96	46·45	27·99	25·62	23·92	52·32	61·40	74·60	39·61	18·85	28·04	58·28	52·20	29·21	18·86	38·15	29·90	22·46	35·13	42·25	38·73	57·60	31·19	32·63	33·70	25·37	35·80	19·29	24·60	29·69	22·33	35·72	40·77	57·27	46·00	46·64	37·16	47
48	30·10	45·04	38·03	39·38	29·69	30·91	30·14	67·30	36·80	51·45	39·02	34·30	32·64	54·05	66·70	85·60	48·18	27·10	38·11	66·41	56·31	48·02	18·32	40·40	36·58	30·01	39·00	54·35	54·77	68·90	36·88	53·34	44·00	32·94	41·50	25·91	27·76	41·10	24·71	43·18	37·80	60·37	44·56	41·47	41·22	48
49	23·58	32·90	29·33	28·75	24·65	21·84	23·93	52·00	25·62	49·60	26·95	27·45	24·03	47·77	56·50	75·70	39·85	23·20	29·61	48·80	48·07	36·39	20·83	30·34	31·13	21·45	38·76	51·00	57·47	62·60	33·78	41·62	35·10	23·54	35·90	21·12	26·64	36·34	23·15	39·03	40·52	47·61	44·70	41·47	37·63	49
1850	19·53	32·26	28·62	29·02	20·50	21·87	16·28	51·92	27·32	30·67	24·62	20·94	20·11	47·99	58·40	86·80	39·28	17·15	24·92	59·53	49·58	35·54	23·49	*33·50*	34·99	18·07	44·60	50·80	60·73	*64·40*	34·34	38·59	34·80	22·80	*29·60*	18·12	26·01	41·22	22·92	35·76	44·31	48·61	37·93	35·07	37·12	1850
51	23·53	25·99	24·26	23·79	22·18	20·32	17·32	52·90	25·34	41·22	23·91	22·25	22·45	41·89	53·80	73·00	34·23	16·90	23·67	62·34	47·56	29·32	21·54	*31·00*	42·24	23·15	41·24	47·10	53·72	*60·30*	32·67	36·93	30·50	23·40	34·70	21·14	27·81	35·15	14·88	33·16	33·42	42·62	36·68	35·91	40·26	51
52	34·01	50·87	50·55	42·05	41·14	35·55	32·04	70·50	42·67	52·65	45·43	31·00	25·30	55·19	66·60	93·30	45·90	27·35	34·76	79·97	65·35	49·13	29·47	41·18	49·22	30·17	40·40	51·30	56·08	65·80	33·69	55·43	46·20	29·42	39·30	24·98	29·85	33·98	26·43	38·30	34·58	37·65	51·29	55·31	45·72	55
53	29·99	38·12	31·70	31·75	28·46	23·35	24·34	50·10	28·36	35·44	30·16	26·63	21·40	36·88	44·00	62·70	35·79	21·60	24·42	50·45	39·46	34·98	27·75	33·73	37·01	28·33	30·87	43·00	36·92	55·40	30·06	41·26	40·80	27·60	34·60	20·58	24·73	29·17	19·95	34·08	33·72	33·43	43·18	42·90	35·07	53
54	19·01	21·81	23·15	19·98	18·27	14·88	13·27	40·30	18·12	30·07	20·73	17·75	13·81	45·46	55·20	76·30	34·40	15·80	22·34	46·82	46·13	29·99	30·95	36·87	36·76	21·68	33·67	50·70	51·77	63·75	31·65	39·19	36·90	20·82	*26·90*	13·97	19·15	42·77	23·05	41·94	42·23	20·23	32·52	28·32	37·57	54
55	23·59	28·96	23·80	23·81	25·89	19·89	20·74	38·80	18·92	*31·71*	28·38	22·00	20·84	36·19	40·90	49·50	28·78	16·60	25·73	37·40	34·54	30·42	16·34	23·32	29·80	21·43	24·09	34·50	27·67	41·47	21·09	22·86	23·70	21·02	29·30	14·70	18·91	33·65	20·93	35·44	35·05	23·53	36·01	32·15	29·44	55
56	23·27	32·97	33·59	29·54	26·63	22·33	20·44	51·10	27·30	39·11	31·43	22·63	19·49	49·23	52·50	63·50	43·16	27·30	29·29	47·55	39·48	34·36	15·08	34·58	40·80	29·79	32·18	42·40	38·29	52·40	30·23	32·75	39·90	32·27	30·80	21·16	24·72	29·87	26·10	34·99	27·41	32·46	37·90	36·60	28·11	56
57	21·16	31·24	31·74	25·65	28·13	23·51	22·59	45·20	25·75	40·71	29·18	27·88	23·17	40·19	43·40	65·80	36·06	23·00	25·14	48·88	38·50	31·91	14·80	33·55	36·20	25·61	31·10	43·00	33·33	50·95	28·71	29·84	33·50	23·75	32·50	19·52	14·94	27·17	21·81	33·51	31·91	32·25	37·74	35·62	35·55	57
58	17·70	25·86	19·36	24·72	20·50	18·36	14·90	41·60	24·80	38·88	27·71	17·50	19·00	41·02	43·70	62·10	34·81	18·60	23·45	50·27	40·23	25·55	23·47	40·56	27·65	23·58	33·68	45·60	34·65	63·50	28·20	*34·50*	36·70	24·33	30·30	21·76	21·16	26·65	24·82	38·16	34·37	36·20	39·06	32·65	34·05	58
59	25·83	34·26	33·48	34·15	32·62	22·35	21·45	49·40	30·54	42·39	26·63	25·25	20·96	46·02	53·40	81·00	46·15	24·80	25·68	66·89	48·29	43·41	22·35	31·36	33·40	25·34	40·49	50·90	38·78	66·17	35·17	*31·60*	33·60	25·38	29·60	21·26	26·70	27·10	26·06	44·05	44·43	35·35	42·59	28·99	40·59	59
1860	31·90	42·00	42·46	36·18	34·22	26·88	27·34	67·60	36·08	50·06	36·89	30·38	30·69	57·66	59·80	89·50	44·28	28·60	36·78	54·17	57·06	48·00	29·23	39·67	29·60	31·97	38·38	48·20	49·04	51·20	30·51	*34·60*	36·80	30·48	41·50	22·35	26·04	28·44	21·51	35·08	37·96	31·91	46·71	42·50	43·74	1860
61	20·45	28·67	28·35	27·29	21·20	20·29	19·40	48·80	25·80	39·98	29·81	25·75	20·38	44·91	55·70	102·20	37·94	23·30	26·42	74·42	60·70	31·22	26·84	41·89	38·10	28·51	42·84	56·30	40·48	65·10	34·34	*35·50*	37·60	29·66	40·80	22·48	24·69	33·66	31·41	40·26	41·18	38·28	49·31	38·30	47·16	61
62	26·32	32·35	30·01	29·93	27·44	23·39	24·21	54·80	29·58	44·65	34·31	24·88	19·93	53·43	61·90	96·40	40·06	21·25	26·79	61·37	54·41	32·50	25·45	42·39	43·10	32·89	53·69	59·50	43·22	73·70	34·47	47·74	42·50	31·33	36·20	25·54	22·44	34·65	24·63	40·26	34·38	38·09	50·10	48·43	39·91	62
63	19·66	30·45	25·74	27·56	22·76	18·25	16·97	50·60	31·44	40·28	27·67	22·88	18·29	53·75	66·00	83·90	40·70	21·45	28·55	71·54	54·92	34·80	26·87	37·00	39·30	29·10	43·34	52·70	43·55	80·40	35·11	28·98	34·70	24·73	26·60	20·14	18·93	26·73	23·88	50·95	39·72	33·15	41·74	30·56	34·71	63
64	16·38	24·67	23·48	21·87	16·96	14·85	17·21	38·30	22·62	32·14	21·79	17·63	15·23	42·74	48·20	71·90	31·88	16·65	*26·20*	52·68	47·57	32·66	34·07	30·25	35·80	30·02	23·53	40·70	38·50	56·20	27·17	36·62	36·20	34·20	36·30	22·64	22·43	36·77	24·76	38·19	33·28	27·55	40·27	29·56	24·52	64
65	28·70	38·45	38·97	32·73	30·25	23·90	25·50	53·80	35·47	48·26	29·88	29·13	24·14	37·51	42·60	72·10	32·47	20·65	*27·05*	49·18	42·67	43·35	27·41	35·73	34·60	27·78	26·95	41·30	52·86	55·79	34·35	36·20	35·20	27·88	34·70	19·62	20·52	35·44	24·96	32·80	34·21	37·45	47·25	43·62	*35·80*	65
66	30·72	36·66	33·79	33·00	30·21	24·56	28·59	49·20	36·94	50·77	34·62	26·75	23·71	59·20	68·10	96·60	47·73	31·05	*29·00*	70·81	60·39	44·42	30·48	38·46	38·53	28·98	44·16	58·70	47·54	86·01	38·71	46·83	38·20	25·98	33·30	22·50	34·17	35·61	26·10	38·85	41·55	35·32	41·24	37·92	41·79	66
67	28·46	29·48	30·48	26·92	25·84	21·52	24·38	49·90	32·70	39·79	29·27	23·38	21·94	45·27	52·20	82·61	38·85	21·90	28·21	52·14	47·31	37·07	26·71	32·26	37·35	31·11	40·58	44·40	46·00	72·55	31·78	43·87	31·60	28·88	34·10	23·90	29·42	28·81	26·31	28·04	39·39	31·95	41·14	34·50	42·21	67
68	25·15	36·13	30·51	27·25	27·33	*25·10*	23·70	60·70	34·29	45·02	30·95	24·75	21·85	46·34	53·20	82·40	39·03	22·63	24·67	65·72	52·75	34·76	25·21	38·08	46·45	30·12	49·20	57·20	48·87	94·68	36·66	45·72	37·90	33·63	35·50	23·18	30·01	31·96	31·62	48·70	43·43	41·46	51·80	50·18	40·67	68
69	24·02	33·38	28·57	27·94	27·67	24·84	26·19	48·80	32·65	37·82	33·81	27·88	24·78	49·00	58·40	77·90	43·90	21·05	28·30	72·00	55·50	32·99	24·29	34·54	32·40	19·68	38·74	47·70	31·60	*60·60*	31·24	35·86	31·50	28·73	30·10	24·83	27·23	27·19	25·66	40·58	43·43	32·55	34·83	38·22	39·45	69
1870	18·55	27·57	24·99	20·60	21·64	16·60	17·21	37·40	21·74	29·43	24·17	16·88	16·40	43·47	52·80	64·40	33·46	20·50	25·83	55·27	43·09	25·05	21·58	32·05	27·70	16·50	27·63	38·10	33·16	56·90	25·42	31·61	23·20	22·40	28·70	19·49	18·91	25·62	17·52	29·26	30·72	28·46	32·40	38·19	32·94	1870
71	22·30	33·19	25·64	24·91	23·49	20·41	22·43	53·40	32·50	39·85	30·99	25·50	21·42	40·93	46·40	69·80	34·82	22·80	*29·00*	46·18	50·25	36·26	24·22	34·88	34·85	30·42	37·18	49·00	45·77	67·89	34·76	41·99	35·30	26·69	33·20	20·61	20·09	30·89	20·76	33·12	32·17	35·66	44·49	46·25	*34·79*	71
72	30·02	43·21	38·64	38·61	36·28	28·31	35·62	71·90	46·00	53·12	44·16	32·50	29·20	57·59	67·50	100·00	59·84	35·90	44·31	83·15	69·18	56·96	30·42	44·26	51·70	44·94	53·14	70·20	66·90	87·54	45·37	53·52	48·30	38·98	52·70	34·61	29·46	40·77	31·85	45·56	39·90	41·28	55·60	64·05	*48·00*	72
73	23·36	31·17	30·06	28·00	23·99	21·27	24·66	50·40	33·72	37·31	25·58	19·63	19·18	42·69	52·60	69·00	31·92	17·50	*23·30*	54·99	49·37	37·72	16·56	28·58	36·50	28·08	41·90	49·70	38·43	69·55	36·18	*39·20*	34·00	28·95	33·30	23·35	23·98	27·33	28·38	41·72	37·73	32·70	39·24	40·28	33·40	73
74	19·95	29·01	24·65	24·79	21·63	20·19	20·57	*53·50*	34·74	43·73	26·74	16·22	18·09	48·67	65·20	78·10	32·21	18·85	22·27	67·03	55·11	35·38	22·52	32·77	35·85	26·27	40·63	45·70	36·14	80·52	34·36	*38·50*	33·40	22·92	28·80	18·48	21·73	30·92	25·31	38·18	38·26	29·37	35·97	39·67	*39·30*	74
75	27·97	35·38	29·02	32·71	29·35	31·00	36·88	*59·80*	38·32	44·86	37·42	32·25	25·50	43·94	55·90	68·50	45·72	22·55	35·92	50·92	46·22	35·64	26·30	33·84	36·70	28·79	36·08	45·20	37·21	63·20	32·76	*43·50*	37·60	30·11	43·20	24·41	24·99	26·96	23·34	27·81	33·06	34·44	44·47	52·21	33·02	75
76	24·10	35·31	33·37	33·99	33·15	30·86	29·37	*64·60*	40·30	46·02	36·15	31·00	29·51	46·10	61·40	72·80	46·54	27·68	34·38	54·51	51·86	41·71	30·81	40·65	45·00	38·70	41·89	51·00	50·62	69·52	39·16	56·00	49·80	37·87	41·60	21·49	19·18	30·97	25·66	34·86	39·12	36·73	47·65	53·68	38·62	76
77	27·28	45·11	39·58	*36·60*	32·49	28·36	29·08	*72·10*	33·78	48·37	33·34	24·25	24·51	60·33	81·70	104·30	55·52	32·70	33·09	79·12	65·78	42·42	30·20	49·85	54·15	35·66	53·81	67·70	52·79	97·33	45·69	61·28	49·50	39·26	44·50	27·77	31·22	41·70	33·02	48·06	40·77	47·55	*52·06*	52·74	43·05	77
78	28·98	33·34	31·25	*32·80*	30·37	25·90	27·28	*51·70*	31·48	45·04	39·54	25·63	25·58	45·79	60·60	57·80	45·86	27·84	*31·30*	52·25	43·76	43·73	21·25	29·88	38·25	27·42	33·76	42·30	38·56	63·30	31·89	40·17	32·10	25·65	37·00	14·34	23·83	29·30	23·32	45·53	38·17	38·92	28·88	37·08	39·27	78
79	31·36	36·98	33·00	*35·10*	34·23	30·13	26·24	*60·00*	34·32	41·64	34·46	24·35	25·90	42·82	55·00	63·90	42·08	23·83	27·48	48·02	43·18	41·57	32·68	39·42	44·95	31·32	33·52	47·60	44·10	61·59	30·41	39·69	37·30	32·08	35·50	16·41	24·60	27·79	25·48	37·03	32·48	38·40	35·71	42·20	30·85	79
1880	29·68	37·52	31·79	*35·10*	34·05	*28·30*	32·93	*49·40*	33·26	38·09	35·69	37·12	34·40	43·36	58·20	63·50	51·43	30·89	33·79	55·81	45·06	44·89	24·23	29·81	43·15	28·60	32·66	39·80	34·32	61·99	30·61	38·96	29·50	24·41	28·90	19·21	*22·60*	25·47	23·65	40·14	36·71	35·91	43·95	42·53	31·44	1880
81	25·72	34·02	33·05	*31·20*	31·72	*24·40*	27·06	*54·90*	32·98	37·60	27·17	26·13	26·36	51·56	68·20	79·20	42·58	27·60	34·03	56·51	59·77	38·88	30·37	40·39	42·35	30·58	35·84	47·90	46·77	66·07	34·71	45·40	42·20	30·59	35·50	*19·40*	*22·00*	29·19	23·54	43·68	36·96	44·74	47·51	46·34	29·30	81
1882	25·18	35·71	35·90	*31·90*	35·22	*30·40*	32·87	*62·10*	38·98	48·10	48·71	30·50	30·18	54·07	76·70	81·30	51·34	31·45	43·01	69·67	59·51	*48·90*	29·02	39·52	41·58	34·27	47·23	56·50	38·95	82·23	38·96	57·92	43·00	30·27	43·25	28·64	*26·50*	34·32	29·91	40·11	38·77	38·33	50·47	49·68	34·21	1882

DETAILS RESPECTING STATIONS QUOTED IN LARGE FOLDING TABLE.

Reference Number	Station.	County.	Observer.	Altitude. feet	Lat. N.	Lon.
					° ′	° ′
1	Greenwich Observatory	Kent	Astronomer Royal	155	51 29	0 0
2	Chilgrove, Chichester	Sussex	W. L. Woods, Esq.	284	50 55	0 49 W
3	Uckfield Observatory	,,	C.L.Prince, Esq. F.R.A.S.	149	50 58	0 6 E
4	Ventnor, I. of Wight	Hants	Dr. G. A. Martin	100	50 36	1 12 W
5	Nash Mills, Hemelhempstead	Herts	Messrs. J. Dickinson&Co.	237	51 46	0 29 W
6	Radcliffe Obs., Oxford	Oxford	The Radcliffe Observers.	210	51 45	1 15 W
7	Althorp Ho., Northampton	Northampton	The Librarians	310	52 17	1 0 W
8	West Street, Tavistock	Devon	T. Windeatt, Esq.	286	50 33	4 10 W
9	Literary Inst., Exeter	,,	The Librarians	155	50 43	3 32 W
10	Royal Inst., Truro	Cornwall	,, ,,	56	50 16	5 3 W
11	Orleton, Tenbury	Worcester	T. H. Davis, Esq.	200	52 18	2 26 W
12	Pode Hole, Spalding	Lincoln	Mr. Harrison	20	52 47	0 12 W
13	Boston	,,	Messrs. Veall & Williams	22	52 59	0 3 W
14	The Folds, Bolton	Lancashire	H.H.Watson, Esq. F.C.S	286	53 35	2 26 W
15	Belmont, ,,	,,	Water Works Officials	800	53 38	2 30 W
16	Coniston	,,	J. G. Marshall, Esq.	206	54 22	3 3 W
17	Redmires, Sheffield	York, W. R.	Water Works Officials	1100	53 22	1 37 W
18	Holbeck, Leeds	,,	Messrs. Marshall & Co.	127	53 48	1 33 W
19	Middleton, Beverley	,, E. R.	Rev. H. D. Blanchard	150	53 56	0 34 W
20	Post Office, Keswick	Cumberland.	J. F. Crosthwaite, Esq.	270	54 36	3 8 W
21	Kent Terrace, Kendal	Westm'reland	S. Marshall, Esq.	146	54 20	2 45 W
22	York Place, Guernsey	Guernsey	Dr. Hoskins, F.R.S.	204	49 27	2 33 W
23	Mull of Galloway	Wigtown	Bd. of Northern Lights.	260?	54 38	4 51 W
24	Corsewall	,,	,, ,,	22?	55 0	5 9 W
25	Glencorse, Pentland Hills	Edinburgh	Water Works Officials	787	55 51	3 15 W
26	Inveresk	,,	Mr. McAuslane	30	55 56	3 3 W
27	Pladda, Arran	Bute	Bd. of Northern Lights.	55?	55 26	5 7 W
28	Mount Stuart, Rothesay	,,	J. Kay, Esq.	100	55 47	5 3 W
29	Mull of Cantire	Argyll	Bd. of Northern Lights.	279?	55 19	5 48 W
30	Stonefield, Tarbert	,,	Colin G. Campbell, Esq.	90	55 45	5 30 W
31	Rhinns of Islay	,,	Bd. of Northern Lights.	74?	55 40	6 31 W
32	Dollar	Clackmannan	Mr. A. Blackwood	178	56 9	3 43 W
33	Loch Leven Sluice	Kinross	The Sluice Keepers	360	56 11	3 19 W
34	Arbroath	Forfar	A. Brown, Esq., LL.D.	60	56 34	2 36 W
35	The Burn [Brechin]	Kincardine	Col. McInroy	250	56 50	2 40 W
36	Girdleness [Aberdeen]	,,	Bd. of Northern Lights.	86?	57 8	2 3 W
37	Buchanness, Peterhead	Aberdeen	,, ,,	30?	57 28	1 46 W
38	Barrahead	Inverness, W	,, ,,	640?	56 48	7 38 W
39	Culloden Ho., Inverness	,, E.	A. Forbes, Esq.	104	57 30	4 9 W
40	Cape Wrath	Sutherland	Bd. of Northern Lights.	355?	58 37	5 0 W
41	Sandwick, Pomona	Orkney	Rev. C. Clouston, LL.D.	78	59 5	3 19 W
42	Royal Inst., Cork	Cork	Dr. Caulfield	70	51 47	8 29 W
43	Mayfield, Portlaw	Waterford	J. Anderson, Esq.	70	52 17	7 19 W
44	Woodstock, Inistioge	Kilkenny	Lady Louisa Tighe	400	52 28	7 4 W
45	Markree Obs., Collooney	Sligo	E.J.Cooper, Esq., F.R.S.	148	54 11	8 28 W

It is not easy to decide what portion of the information which so important a table will yield ought to be first extracted. Merely for the purpose of verification, I had the means taken for each station and for each decade, and then converted the whole of the yearly totals into their ratios to the mean of the forty years 1840—79. These processes give so much and such varied information, that it is very difficult to select the points for discussion on the present occasion, especially as the amount of data is such, that there is not time to examine more than one or two questions this year.

In what parts of the British Isles have recent years been most exceptionally wet?

Although I am not sure that the above is the most important subject to consider, it certainly is one vitally affecting agricultural interests, and one which is of present importance in relation to the Bill for the "Prevention of Floods," which should rather be called "Mitigation of Damage by Floods."

In order to investigate this point, the following table has been compiled. It shows the relative wetness of each of the last eight years, as compared with the mean for the forty years, 1840—79, at the whole of the 45 stations. It shows, in the last column, the average ratio for the eight years, 1875—82 at each station; and lastly, indicates by the occasional + following a value, the cases in which that year has been wetter than any year in the period 1840—82.

The values are startlingly large, though scarcely larger than various statements in recent volumes of *British Rainfall* must have led our readers to expect, and it is impossible to say whether they are more remarkable for their magnitude or for their wide distribution.

As regards their magnitude we have in the last eight years not (as equable distribution would assign us) 8·3 instances of unprecedented maxima, but nearly twice that number; there are 15 such cases, viz., seven in England and eight in Scotland.

1875.	1876.	1877.	1880.
Althorp, E.	Loch Leven, S.	Tavistock, E.	Spalding, E.
		Bolton, E.	Boston, E.
		,, Belmont, E.	
		Coniston, E.	
		Corsewall, S.	
		Glencorse, S.	
		Pladda, S.	
		Stonefield, S.	
		Rhinns of Islay, S.	
		Dollar, S.	
		Arbroath, S.	

E. = England. S. = Scotland.

RATIO (TO THE MEAN OF 1840-79) OF EACH OF THE EIGHT YEARS, 1875 TO 1882.

Stations.	1875	1876	1877	1878	1879	1880	1881	1882	Mean
Greenwich	114	98	111	118	128	121	104	102	112
Chilgrove	106	106	135	100	111	112	102	107	110
Uckfield	97	112	133	105	111	107	111	120	112
Ventnor	115	119	129	115	116	123	110	112	117
Hemelhempste'd	109	123	121	113	128	127	118	131	121
Oxford	133	132	121	111	129	123	104	130	123
Althorp	151+	120	119	112	107	135	111	134	124
Tavistock	112	121	135+	97	112	92	103	116	111
Exeter	125	131	110	103	112	108	107	127	115
Truro	107	110	115	107	99	91	90	115	104
Orleton	123	119	110	130	114	118	90	134	117
Spalding	128	123	96	101	96	147+	103	121	114
Boston	112	130	108	113	114	151+	116	133	122
Bolton	94	99	129+	98	92	93	111	116	104
,, Belmont	98	108	144+	106	97	102	120	135	114
Coniston	90	95	136+	76	83	83	104	106	97
Redmires	114	116	138	114	105	128	106	128	119
Leeds	99	121	143	122	104	135	121	138	123
Beverley	129	123	119	112	99	121	122	154	122
Keswick	87	93	135	89	82	95	97	119	100
Kendal	92	103	131	87	86	90	119	118	103
Guernsey	98	114	116	120	114	123	106	134	116
Mull of Galloway	109	128	125	88	135	100	126	120	116
Corsewall	92	111	136+	81	107	81	110	108	103
Glencorse	99	121	145+	103	121	116	113	112	116
Inveresk	87	141	130	100	114	104	111	125	114
Pladda	93	108	139+	87	86	84	92	122	101
Rothesay	92	103	137	85	96	81	97	115	101
Mull of Cantyre.	85	115	120	88	101	78	107	89	98
Stonefield	96	106	148+	96	93	94	100	125	107
Rhinns of Islay.	98	117	137+	96	91	92	104	117	107
Dollar	107	137	150+	98	97	96	111	142	117
Loch Leven	104	138+	137	88	103	81	116	119	111
Arbroath	108	136	141+	92	115	88	110	108	112
The Burn	122	118	126	105	100	82	101	122	110
Girdleness	111	98	127	65	75	88	89	108	95
Buchanness	100	77	125	96	99	91	88	106	98
Barrahead	85	97	131	92	87	80	92	108	97
Culloden	93	103	132	93	102	94	94	120	104
Cape Wrath	72	91	125	119	97	105	114	104	103
Sandwick	89	105	110	103	87	99	99	104	100
Cork Roy. Inst.	94	100	130	106	105	98	122	105	108
Portlaw	105	112	123	68	84	104	112	119	103
Inistioge	126	130	128	90	102	103	112	120	114
Markree	89	104	116	106	83	84	79	92	94

I was by no means prepared for the excess shown by the Scotch returns. Fortunately, I have not written a line upon the subject, but having noticed that in the north-west of England recent years have not been exceptionally wet, I have been hitherto under the impression that the excess was a local rather than a general phenomenon. But the foregoing table, and the short list on p. 24, dispose of that idea. They show that in the N.W. of England, at four Scotch lighthouse stations, viz., one in the extreme S.W., two in the extreme E. of Aberdeenshire, one in the far West Hebrides, and at one rather doubtful record from the N.W. of Ireland — or, altogether, six stations out of 45—the rainfall of the last eight years has been about 3 per cent. below the average, but at all the others, viz., at 39, it has been equal to or above the average.

If we sort out the mean excesses into groups we obtain the following values :—

	100 to 105.	106—110.	111—115.	116—120.	121—125.
England	4	1	6	4	6
Scotland	6	3	3	3	
Ireland	1	1	1		
Total	11	5	10	7	6

This shows that the excesses extended to Scotland, for there were in that country six stations with a mean excess of more than 10 per cent. ; yet all the largest values were in England, and if we state the seven stations with the greatest excesses, their distribution will throw considerable light upon the locality.

Mean per-centage of excess :—

19 Sheffield.
21 Hemelhempstead.
22 Boston ; Beverley.
23 Oxford ; Leeds.
24 Althorp.

All these stations are near the centre of England, or to speak more precisely, all are within a circle which has Loughborough, in Leicestershire, for its centre, and which has a radius of 75 miles.

If we consider the excesses merely on the ground of frequency, instead of on that of amount, we shall find that the table on page 25 gives eight stations at which all the last eight years have been above the average. These stations are included in a circle, with its centre at Cirencester, and having a radius of 120 miles. We showed last year that there were reasons for doubting some of the Exeter values, and we do not think that station entitled to be one of the eight ; if it

is omitted, the size of the circle is reduced to one of 100 miles radius, and its centre moved to Buckingham.

If we include stations at which seven out of the eight years were in excess, the circle includes some stations in the south of Scotland, and one in the south-east of Ireland, but the centre moves very little, only to Bridgnorth.

If now we compare these centres, we shall find that they are all comparatively close together; they are all within 30 miles of Stratford-on-Avon, in Warwickshire.

Lastly, Stratford-on-Avon is only 45 miles S.S.W. of Loughborough, the centre obtained by the other mode of investigation.

Although, therefore, we postpone the final determination of the area or areas in which the excess for the eight years has been the greatest, it is impossible to doubt that central England will stand out as the principal sufferer. The work done in the compilation of the folding table given this year may be likened to the primary triangulation of a survey, and with it as a basis, we shall be able subsequently to fill in the details, to give with very considerable accuracy the areas over which this abnormal excess has prevailed and its relative intensity. Meanwhile, we repeat the question with which these remarks commenced, and add the answer obtainable from present materials.

In what parts of the British Isles have recent years been most exceptionally wet?

Chiefly in Central England, but generally over England (with the exception of the Lake District), and to a less degree over Scotland, and very slightly over the greater part of Ireland.

P.S.—With reference to the remarks on page 19 as to a possible 12 year wet period, reference may be made to the note from Exeter on page [96], where of the four wettest years three fall into a 12 year series, 1828, 1852, and 1876. Also, to a remarkable note from Kilrush on page [112] as to an infallible (?) sequence of bad seasons every 11th year.

RAINFALL ON BEN NEVIS.

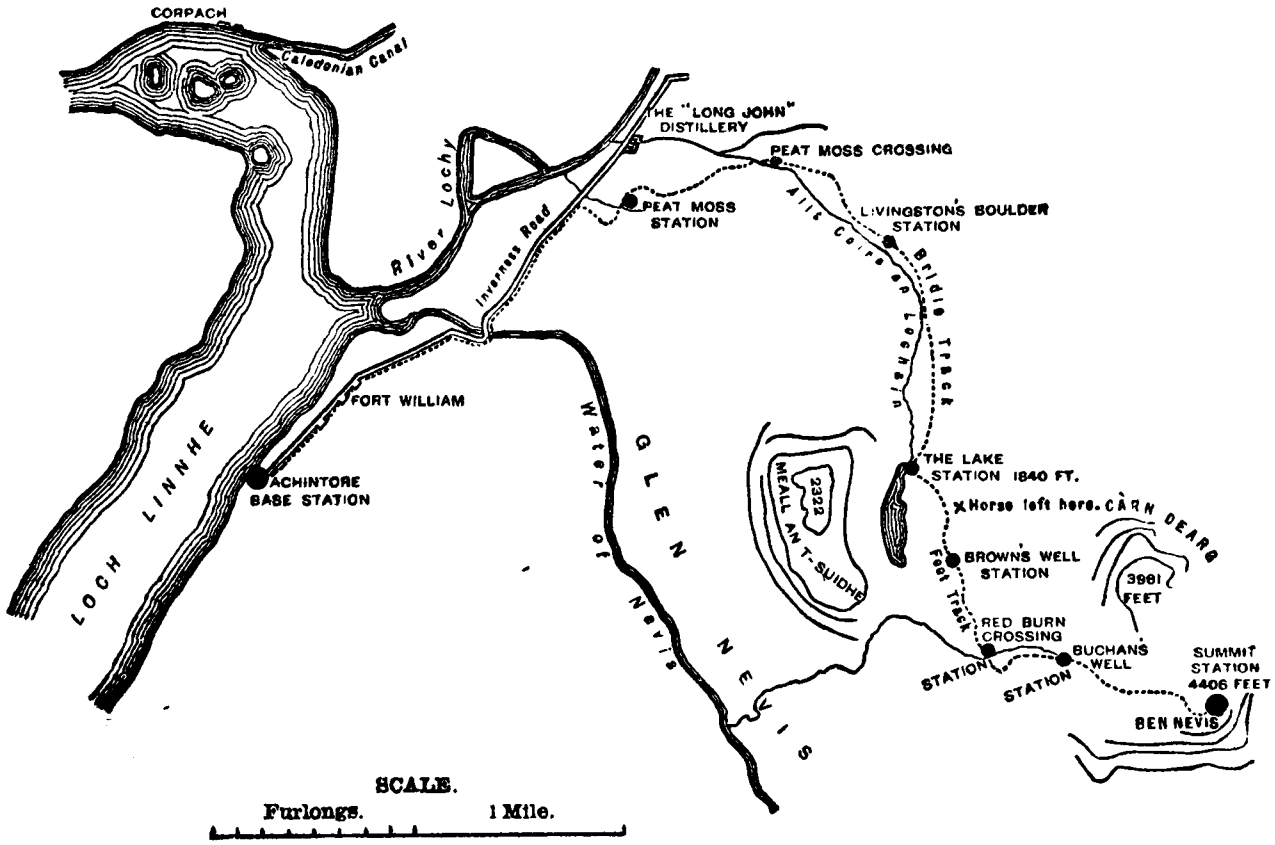
On page 64 of *British Rainfall*, 1881, we had the pleasure of giving the first results of Mr. Clement Wragge's observations of the rainfall on the summit of Ben Nevis.

This year we treat the subject at greater length, partly because the observations in 1882 were much more extensive, and partly because, greatly to our regret, Mr. Wragge's personal supervision is suspended. The observations are now, we believe, under the direct control of the Scottish Meteorological Society, which is making vigorous and apparently successful efforts to raise funds for the erection of a fixed observatory on the summit, and therefore the present seems a fitting occasion for reviewing the results hitherto obtained.

We commence by placing before our readers details respecting the locality. Ben Nevis is in lat. 56° 48′ N.; lon. 5° 0′ W., and the summit is 4,406 ft. (1,343 metres) above the level of the sea. Large tracts of land reach W. and S.W. of it for from 35 to 50 miles, so that it is about that distance from the open Atlantic, and the land is mountainous, there being many summits exceeding 2,000 feet, and one, Ben More, in Mull, reaching 3,172 feet. By-the-bye, Ben More would be a splendid place for a high level station—a road runs past its base—there is no high ground between it and the Atlantic, and it is but five or six miles from the coast. Another capital place would be on the top of one of the Cuchullin Hills in Skye, all which are close to the ocean, and all more than 3,000 feet high.

However, Ben Nevis has not only the advantage of being 1,000 feet higher than any other conveniently available mountain, but it has also that of being isolated, and of having a considerable arm of the sea running near to its base. It rises just to the east of a loch, which, we believe, ought to be called Loch Eil, but which appears on the Ordnance Map as Loch Linnhe. Mr. Clement Wragge has published in *Good Words* for June, 1883, a very interesting account of the re-organization of his station for 1883, and the publishers have kindly lent us the annexed map. In it Mr. Wragge has

SKETCH MAP OF ROUTE FROM ACHINTORE TO SUMMIT OF BEN NEVIS.



followed the Ordnance authorities, and called Loch Eil (which we believe commences at Corran Point), Loch Linnhe. The real name is of no meteorological importance, but it may as well be cleared up, so we state the case in detail.

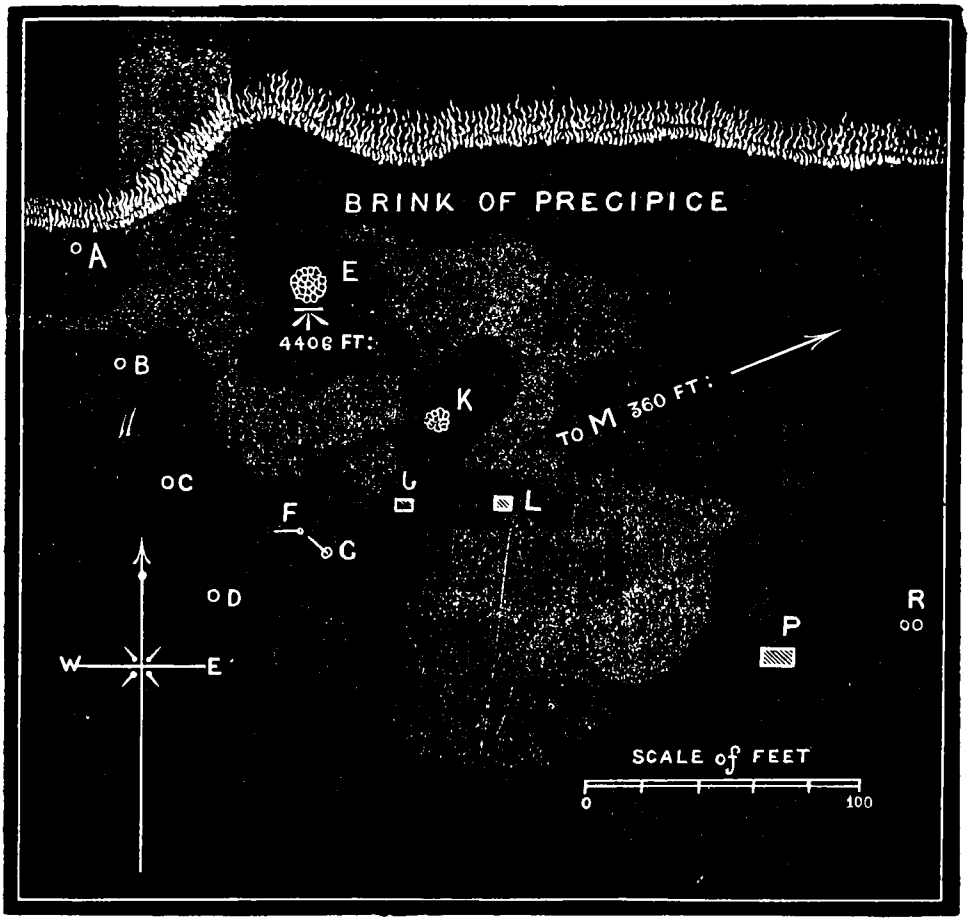
An arm of the sea runs north-eastward from the east end of the Isle of Mull; about 24 miles above Duart Castle the loch contracts at Corran Point. As far as this, all authorities agree in calling it Loch Linnhe. Beyond the contraction the loch again widens, and continues in the same N.E. direction for about nine miles to Fort William; this part is sometimes called Loch Linnhe, sometimes Loch Eil, and the preponderance of evidence seems in favour of the latter. Just beyond Fort William it turns abruptly to the W., and this portion is always called Loch Eil.

To resume our notes on the *Good Words* map. The rain gauge stations were (1) at Achintore, in a field at the edge of the loch; (2) at Fort William, near the letter F; (3) Peat Moss station, $2\frac{1}{4}$ miles N.E. of Achintore; (4) the Lake station, $3\frac{1}{4}$ miles east of Achintore; (5) the summit station, $4\frac{3}{4}$ miles E.S.E. of Achintore.

Mr. Clement Wragge has favoured us with a plan of about two acres of the summit, which is level. Mr. Wragge says that there is not a difference of 3 ft. between any parts of the area represented. It does not seem needful to add anything to this plan, which, with the annexed references, seems complete.

REFERENCES :—

A B C D—Four rain gauges, for details see table on p. 31.
E—Cairn built by Ordnance Survey Officials.
F—Terrestrial Radiation Thermometer.
G—Solar Radiation Thermometer.
H—Wragge's Well, not on plan, but 280 ft. S. ½ W. of **J**, and 71 ft. below summit.
J—Stevenson's Thermometer Screen.
K—Cairn containing Standard Barometer.
L—Stevenson's Screen, containing Turn-over Hygrometer by Negretti and Zambra.
M—Dr. Angus Smith's Apparatus for measuring the Actinism of Light.
P—Hut for temporary shelter of Observer.
R—Earth Thermometers, 1 ft. and 2 ft. deep.



Portion of Summit of Ben Nevis.

As regards the observations, they have been thrown into a table, and for convenience of discussion the 1881 observations are included, although they were not as numerous as those in 1882.

During 1882 Mr. Wragge had four gauges on the summit, and what is almost more important, he had one about half way up, viz., one at The Lake. The following table gives the whole of the monthly totals.

Analysis of Rainfall Observations made on Ben Nevis, 1881-82, *by* CLEMENT L. WRAGGE, ESQ., F.R.G.S., F.M.S.

	Fort William Public School.	Achintore.	Peat Moss, Ben Nevis.	The Lake, Ben Nevis.	Ben Nevis Summit. Gauge at A.	Gauge at B.	Gauge at C.	Gauge at D.	Excess of Summit above Fort William.	Ratios Fort William =100. Lake.	Summit
	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.			
Diameter ...	0 6	0 5	0 5	0 5	0 5	0 5	0 5	0 8	...	...	...
Ht. above ground	1 0	1 0	1 10	1 0	1 0	1 0	1 0	1 0	...	...	...
Altitude, feet	36	25	45	1850	4406	4406	4406	4406	..	1850	4406
1881. June	6·25	...	...	...	...	...	...	12·31	+ 6·06	...	197
July	11·57	10·90	...	...	...	...	...	15·19	+ 3·62	...	131
Aug.	6·90	6·41	...	...	...	...	...	12·34	+ 5·44	...	179
Sepr.	2·30	2·01	...	...	...	...	...	6·09	+ 3·79	...	265
June-Sep.	27·02	...	...	...	...	...	...	45·93	+18·91	...	170
July-Sep.	20·77	19·32	...	...	...	...	...	33·62	+12·85	...	162
1882. June	4·37	3·95	3·37	5·75	...	...	...	8·84	+ 4·47	131	202
July	6·47	7·14	5·38	6·96	10·35	9·95	9·49	9·65	+ 3·18	108	149
Aug.	5·13	4·30	3·32	6·05	10·31	11·26	10·93	11·39	+ 6·26	118	222
Sept.	5·70	5·57	5·09	6·67	10·66	10·05	10·14	10·02	+ 4·32	117	176
Oct.	3·65	3·25	2·58	4·29	...	...	...	6·41	+ 2·76	118	176
June-Oct.	25·32	24·21	19·74	29·72	...	...	...	46·31	+20·99	118	183
July-Sep.	17·30	17·01	13·79	19·68	31·32	31·26	30·56	31·06	+13·76	114	148
Nine Months	52·34	...	...	...	...	...	...	92·24	+39·90		176

The first and singular fact is that the fall of rain on Ben Nevis *seems* to be as unlike what was expected as it is possible for anything to be.

The observations in the English Lake district led Dr. Miller to the conclusion that the fall of rain increased with the altitude of the soil up to about 1500 feet, and then decreased. Prof. Phillips arrived at a similar result, and as this seemed to agree with the usually assumed level above which nimbi are not often seen, the idea has generally been accepted.

We have turned to Dr. Hann's recently published and excellent *Handbuch der Klimatologie* (Stuttgart, 1883), but we find that he is almost as much in the dark as we are. After giving various illustrations of the increase of rainfall with the elevation of the ground, most of which, by the bye, show increase up to 3,000 ft., he says :—

"The determination of the altitude at which the increase of rainfall with elevation ceases, and the amount commences to decrease, is of great interest. There are, however, at present very few such determinations."

After citing several cases, in only one of which, however (excepting the before-mentioned paper by Prof. Phillips), do we notice decrease at high stations, Dr. Hann concludes with the following remarks :—

"It is evident that on high mountains there must be an upper limit of maximum amount (not frequency) of rain. The decrease of temperature with increasing elevation involves a decrease in the amount of vapour held in the air, and therefore at a certain height the intensity of the rain must be so greatly diminished that no increase of frequency can make up for it. The maximum rainfall is to be expected at that height at which, as a rule, condensation is first produced, because the quantity of water yielded is gradually less and less the lower the temperature. Owing to the greater humidity of the winter months this limit is much lower, and the intensity of the rain less than in summer, but owing to the increased frequency of winter rains the total quantity becomes important. We possess no information respecting the movement of this limit during the year, but the excess of rainfall on some of the mountains in central Europe during the winter months seems to indicate that they reach it."

I do not presume to assert that the previously accepted theory is incorrect, but submit three facts for consideration.

(1) The arguments for a decrease at greater heights than 1,500 feet (or thereabouts) are chiefly founded on the results of gauges on Scawfell. I have never been on the top of Scawfell, but it is surely possible that the position of the gauge is one in which the currents of wind are so deflected, by contact with the side of the mountain, that the gauge shares the fate of those on buildings in exposed situations, and does not collect as much as it should. This might easily be ascertained by placing several gauges in different positions and comparing the records.*

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* Since writing the above, I have found a striking illustration of the inconsistent records at some high stations, and curiously enough at stations started by Mr. Clement Wragge himself, viz., those on Beacon Stoop, in Staffordshire. There are two gauges—one at 1,212 ft., and one at 1,216 ft., so that the difference is not due to altitude. During eleven months of 1882, the old gauge at 1,216 ft. collected 30·48 in., and the new one at 1,212 ft. 50·43 in., or 65 per cent. more.

(2) The results just given from Ben Nevis are thoroughly consistent in contradicting those for the English Lake District. They are accordant in every respect, and throughout both periods. In the summer of 1881, the solitary gauge on Ben Nevis collected 19 in., or 70 per cent. more than the low level one. In 1882 there were four gauges on the summit; they agreed remarkably (within 2 per cent.), and they gave for the top station an excess of 21 in., or 83 per cent. Therefore, there can be little doubt that, at any rate during the summer, the fall on the top of Ben Nevis is 75 per cent. greater than at the sea level on its western side. I add this last remark, because, before it is possible to speak positively as to the rate of decrease, it is indispensable that one or more gauges be placed at low level stations on the N. and E. of the mountain.

(3) In 1882, Mr. Wragge not only had four gauges on the summit, but also one at the Lake, at 1,850 feet, just about the level at which, according to generally-received opinion, the fall ought to be the greatest, but the fall there never was the maximum, never was even within an inch or two of being so, and the average results for five months were—

	Fort William.	The Lake.	Summit.
Altitude.....	36 ft.	1,850 ft.	4,406 ft.
Total Rainfall	25·32 in.	29·72 in.	46·31 in.
Ratio	100	118	183

This looks as unlike a maximum at 1,500 feet as can readily be imagined.

TERMINATION OF THE SECOND SERIES OF THE ROTHERHAM EXPERIMENTS.

In all the volumes of *British Rainfall* from 1865 onwards will be found notes upon the gauges, and the results obtained from the gauges, erected in 1865, at the expense and under the supervision of Mr. Chrimes, of Rotherham. It would be altogether contrary to our practice to repeat details already given fully in earlier volumes, and we therefore give merely such brief outlines as are necessary in explanation of the following tables and remarks :—

Full descriptions and engravings of all the gauges, a ground plan of their first position, and a general view of them *in situ*, are given in *British Rainfall*, 1869, which volume also contains a discussion of the observations during the years 1866-9, and various diagrams illustrative of the relations existing between the velocity of the wind, the angle at which rain is driven by it, and the ratio which the amount of rain collected at 25 ft. above the ground bears to that collected at 1ft. above the ground.

Further discussions are given in various subsequent volumes. In 1874 an important change was made. The gauges had originally been on a level plateau of considerable size ; but in 1874, when by nearly ten years' work all the essential features of the original site had been determined, they were removed to the bank of Ulley Reservoir, only a few miles from their former site, but one which had hardly anything in common with it. Here they were ranged in single file along about 200 ft. of one end of the somewhat narrow (under 20 ft.) reservoir bank. Mr. Mansergh, C.E., being consulting engineer to the Corporation, not only arranged for their erection, but also supplied a photograph, very accurately reproduced as frontispiece to *British Rainfall*, 1875, in which volume will also be found a ground plan illustrative of the engraving. The results obtained by the instruments in this position are classified as Series II.

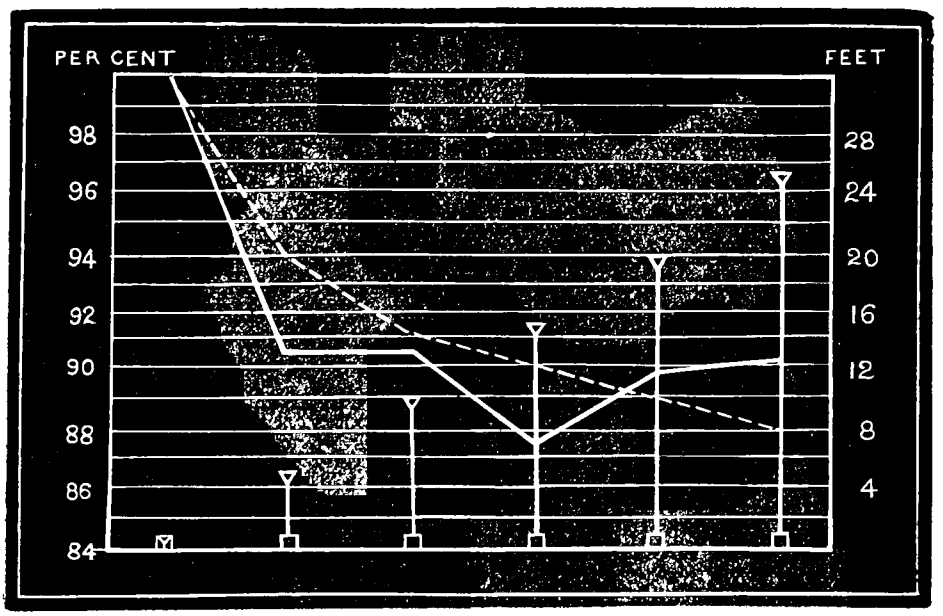
After completing eight years' observations under the condition indicated by the descriptions just quoted, a further alteration was

made in December, 1882, and a Third Series commenced January 1st, 1883.

We are anxious not to overload these pages with tables, and yet, in rainfall work, one can scarcely advance a step without a mass of figures. However, we will try to put the most important results of the Second Series, *i.e.*, 1874–82, as tersely as possible. Until early in 1876, the gauges 25 ft. above the ground, were not in good order, and therefore, in drawing up the final averages, we have used only the years 1877 to 1882. We have worked out the results in considerable detail, but the following table gives the essential features, freed from minutiæ, and it must be remembered that it is based upon six years' observations, giving nearly 1,000 entries for each of the daily gauges, and about 70 for each of the monthly ones.

Height of Gauge above Ground.	Mean Rainfall.		Ratio of fall at each height to that at one foot.			Usual Ratios.	Diff. at Ulley.
	Daily Gauge.	Monthly Gauge.	Daily Gauge.	Monthly Gauge.	Mean of 2 Gauges.		
1 foot	26·55	26·79	100·0	100·0	100·0	100·0	0·0
5 feet	23·71	24·50	89·5	91·5	90·5	94·0	—3·5
10 feet	24·01	24·26	90·6	90·5	90·5	91·0	— ·5
15 feet	23 60	23·31	89·0	86·3	87·6	90·0	—2·4
20 feet	24·14	23·69	91·2	88·5	89·9	89·0	+ ·9
25 feet	24·26	23·81	91·5	88·8	90·1	88·0	+2·1

We have in previous volumes called attention to the unusual character of the results obtained at this station, but now that we have the whole series before us, it seems well to show by a diagram,



what are the exceptional features, and then to see how perhaps they may be explained.

In the foregoing diagram the gauges are represented of their various heights, as read off by the right-hand scale. The relative amount collected by each at Ulley Reservoir (that collected by the gauge 1 ft. above the ground being taken as 100), is shown by the thick continuous line, and the average decrease as found at various other localities by the dotted line.

Taking first the continuous (Ulley) line, we at once notice the remarkable fact, that the difference of only 4 ft. between the gauges, whose mouths are 1 ft. and 5 ft. respectively above the grass, causes the latter to collect one-tenth less; the fall at 5 ft. is only about 90 per cent. of that at 1 ft. This very large difference in the first 4 ft. would lead one to expect that the locality was one where the decrease was exceptionally great, and that at great heights above the ground the fall would be extremely small. But the reverse will be observed to be the case, for the decrease stops abruptly, and the amount collected is practically identical at 5, 10, 20, and even 25 ft. This may be due to either of two causes. It may be that (as we have elsewhere shown) elevation decrease being due to wind; the wind's action in this very exposed locality may be just as strong at 5 ft. as at 25 ft. Or it may be that the wind's force varies in different parts of the reservoir bank, for the 5 ft. and and 15 ft. gauges, which show the greatest departures from the dotted line (which, in short, seem to catch too little), are precisely those which are nearest to the centre of the bank, and where the wind would be most violent.

The gauges have now been so re-arranged as to afford data for examining the distribution of rainfall along the bank.

RAIN GAUGE EXPERIMENTS, ULLEY RESERVOIR, ROTHERHAM, 1882.

Lat. 53° 22′ 59″ N. Lon. 1° 19′ 9″ W. Altitude 184 ft.

HEIGHT ABOVE GROUND, 5 FT.

Months.	FIVE MOUTHED GAUGE.					Inclined Rotating Gauge.
	Facing East.	Facing North.	Facing West.	Facing South.	Horizon Centre.	45°
January	·734	1·092	·657	1·058	2·597	3·925
February...	·125	·832	·584	·678	1·317	2·179
March	·070	·997	1·114	·369	·944	1·788
April	·269	2·369	·933	1·250	2·435	4·624
May...	·034	·772	·432	·536	1·676	1·995
June...	·120	·764	·732	1·570	3·244	3·777
July.....	·043	·280	·430	·996	2·063	2·430
August	·040	·496	·610	·720	1·647	2·168
September	·063	1·328	·318	·795	2·063	2·870
October	·397	2·271	·725	1·553	3·672	6·396
November	·209	1·605	1·786	1·762	2·369	4·142
December	·988	7·928	2·293	1·278	3·084	...
Year	3·092	20·734	10·614	12·565	27·111	...
Jan.-Nov.	2·104	12·806	8·321	11·287	24·027	36·294

RAIN GAUGE EXPERIMENTS, ULLEY RESERVOIR (*continued*).

ELEVATED GAUGES.

Height abov Ground ...	1 ft.			5 ft.			10 ft.		
Months.	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.
January	2·614	2·704	+·090	2·602	2·672	+·070	2·548	2·560	+·012
February.....	1·381	1·360	—·021	1·236	1·501	+·265	1·257	1·295	+·038
March	·966	·942	—·024	·849	·912	+·063	·892	·913	+·021
April	2·574	2·614	+·040	2·312	2·672	+·360	2·338	2·412	+·074
May.....	1·713	1·692	—·021	1·615	1·687	+·072	1·607	1·621	+·014
June.....	3·279	3·367	+·088	3·215	3·258	+·043	3·133	3·200	+·067
July.....	2·036	2·176	+·140	1·984	2·167	+·183	1·983	2·140	+·157
August	1·789	1·827	+·038	1·632	1·650	+·018	1·668	1·753	+·085
September ...	2·160	2·186	+·026	1·987	2·103	+·116	2·076	2·032	—·044
October	3·873	3·897	+·024	3·458	3·441	—·017	3·530	3·638	+·108
November ...	2·426	2·442	+·016	2·160	2·442	+·282	2·225	2·219	—·006
December ...	3·892	3·925	+·033	3·292	4·143	+·851	...	...	...
Year	28·703	29·132	+·429	26·342	28·648	+2·306	..	...	...
Jan.-Nov. ...	24·811	25·207	+·396	23·050	24·505	+1·455	23·257	23·783	+·526

ELEVATED GAUGES (*continued*).

Height above ground	15 ft.			20 ft.			25 ft.		
Months.	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly	Diff.	Read Daily.	Read Mnthly.	Diff.
January	2·565	2·504	—·061	2·559	2·416	—·143	2·549	2·418	—·131
February.....	1·229	1·214	—·015	1·259	1·238	—·021	1·220	1·131	—·089
March	·812	·817	+·005	·880	·898	+·018	·843	·902	+·059
April	2·243	2·224	—·019	2·341	2·358	+·017	2·306	2·372	+·066
May	1·581	1·516	—·065	1·588	1·543	—·045	1·568	1·532	—·036
June	3·177	3·119	—·058	3·189	3·200	+·011	3·087	3·216	+·129
July	1·947	2·137	+·190	1·954	1·978	+·024	1·870	1·678	—·192
August	1·614	1·524	—·090	1·615	1·670	+·055	1·587	1·430	—·157
September ...	1·956	1·868	—·088	1·990	2·001	+·011	1·942	1·872	—·070
October	3·505	3·406	—·099	3·609	3·572	—·037	3·525	3·264	—·261
November ...	2·083	2·210	+·127	2·147	2·207	+·060	2·313	2·200	—·113
December ...	...	...	...	...	...	...	...	..	...
Year	...	...	...	...	...	...	...	...	...
Jan.-Nov. ...	22·712	22·539	—·173	23·131	23·081	—·050	22·810	22·015	—·795

RAINFALL AT THE ROYAL OBSERVATORY, GREENWICH.

Lat. 51° 28′ 38″ N. Long. 0° 0′ 0″

Communicated by W. H. M. CHRISTIE, Esq., M.A., F.R.S., F.R.A.S., &c., Astronomer Royal.

No. of days on which rain fell.	1882	MONTHLY AMOUNT OF RAIN COLLECTED IN EACH GAUGE.							
		Osler's Anemometer.		On roof of Octagon Room.	On roof of Magnetic House.	On roof of Photographic Thermometer Shed.	Gauge partly sunk in the ground. *a*	Gauge partly sunk in the ground. *b*	Gauge partly sunk in the ground *c*
		Self-registering Gauge.	Second Gauge.						
		in.	in.	in.	in.	in.	in.	in.	in.
10	Jan. ...	·626	·599	·935	1·074	1·238	1·352	1·278	1·238
9	Feb. ...	·586	·586	·802	·954	1·090	1·153	1·121	1·127
11	March	·533	·561	·751	·943	1·092	1·144	1·051	1·070
13	April..	1·302	1·349	1·587	1·968	2·263	2·403	2·114	2·190
11	May...	1·075	1·104	1·183	1·222	1·330	1·367	1·226	1·262
19	June...	1·367	1·407	1·778	2·038	2·252	2·356	2·114	2·123
19	July...	1·806	1·804	1·949	2·201	2·348	2·451	2·180	2·249
15	Aug....	·651	·606	·833	·921	1·078	1·159	1·024	1·003
14	Sept...	1·736	1·753	2·052	2·217	2·396	2·405	2·344	2·348
23	Oct. ...	3·656	3·833	4·282	4·943	5·333	5·421	5·297	5·337
19	Nov ...	1·124	1·127	1·616	1·831	2·095	2·199	2·112	2·179
17	Dec. ..	·835	·847	1·379	1·472	1·678	1·771	1·758	1·770
180	Sums..	15·297	15·576	19·147	21·784	24·193	25·181	23·619	23·896

The heights of the receiving surfaces are as follows:

	Above the mean level of the Sea.			Above the Ground.	
	ft.	in.		ft.	in.
The two Gauges at Osler's Anemometer	205	6	...	50	8
Gauge on the roof of the Octagon Room	193	2	...	38	4
Gauge on the roof of the Magnetic House	176	7	...	21	9
Gauge on the roof of the Photographic Thermometer Shed	164	10	..	10	0
The three Gauges, partly sunk in the ground	155	3	...	0	5

In regard to the ground gauges, (*a*) is the old gauge; (*b*) the old monthly gauge: and (*c*) an additional ground gauge.

The gauges are all read daily.

A rainy day is one on which 0·005 in., or more, is collected in the ground gauge (*a*)

WILLIAM ELLIS,
For the Astronomer Royal.

January 6th, 1883.

THE STAFF OF OBSERVERS.

OUR remarks in this section are considerably shortened in consequence of the details given on page 8, respecting the search for additional observers which we made in the winter of 1882.

We must first say a few words upon the existing County Organizations, taking them in their regular sequence.

SUSSEX.—We have seen no local list for this county for a long time. Probably Mr. Sawyer has given up preparing them. If so, it would be well if some one else would volunteer.

HERTFORDSHIRE.—The returns from nearly all the stations in this county, and from a few outside its boundary are collected by the Rev. C. W. Harvey, of Throcking Rectory, Buntingford, and published in abstract in the *Herts and Cambridge Reporter*, and subsequently in the "Transactions of the Hertfordshire Natural History Society."

NORTHAMPTON.—Observations collected by Mr. H. Terry, of Northampton, and abstract published in the *Northampton Herald.*

ESSEX.—Observations collected by Mr. D. Radford Sharpe, of Bocking, Braintree, and published *in extenso—i.e.*, the daily values for each station, in the *Essex Weekly News* and in other county papers.

NORFOLK.—The Rev. Canon Du Port continues the collection of all the records in this county, and they are published *in extenso* in the *Norfolk Chronicle.* Canon Du Port has recently re-arranged his stations, grouping them according to the river basin in which each is situated.

WILTSHIRE.—In this county also the organization is splendid; in fact, the quality of our own work would be enormously improved if we could find in each county, correspondents who would give to the preparation of detailed monthly tables as much time and care as are given in Essex, Norfolk and Wiltshire. This year the Rev. T. A. Preston has surpassed himself, and not merely kept up his original staff, but added thereto at least two dozen observers, An abstract of all the returns is published in the *Marlborough Times*, and the records *in extenso*, with remarks, are privately printed at Mr. Preston's cost.

DEVON AND CORNWALL.—We couple these counties, because the results from both are collected by the Editor of the *Western Morning News*, and published in abstract in that journal.

HEREFORD.—Since the death of the Rev. Nash Stephenson, the whole care of collecting, and printing in abstract, the Herefordshire rain returns has fallen upon the staff of the *Hereford Times*. As they obviously have many other matters requiring attention, it is desirable that some one with more leisure should volunteer to occupy Mr. Stephenson's position.

ISLE OF MAN.—We believe that Mr. A. W. Moore, of Cronkbourne, who has taken active steps towards improving the distribution of rain gauge stations in the Isle of Man, is in the habit of publishing monthly abstracts in one of the Manx papers, but we have not seen one for a long time.

LONDONDERRY.—We have heard nothing from Mr. Campbell for more than a twelvemonth, and believe that his, the only county organization, either in Scotland or Ireland, has been abandoned.

ENGLAND AND WALES.

ABSENT RECORDS.	INSERTIONS.
MIDDLESEX (45).	
London (Hamilton Terrace)—*Record ceased.*	Chelsea (Whitehead's Grove).
Kilburn (Netherwood Street)—*Record ceased.*	Gunnersbury Station.
Muswell Hill *(monthly)*—*Record ceased.*	London (Lansdowne Crescent, W).
Hornsey (Campsbourne Road)—*Observer left.*	Upper Clapton (Warwick Road).
East Finchley (Hilton House)—*Observer left.*	East Finchley (Elmhurst).
Enfield—*Record ceased.*	Winchmore Hill (Chase Side).
,, Chase—5 *in. gauge overflowed.*	Enfield (Old Park).
SURREY (74).	
Croydon (Beecholme, Bramley Hill)—*Obsr. left.*	Reigate (Dover's Lodge).
,, (Church Street)—*Record ceased.*	,, (Holmfels).
Mitcham (Woodburn House)—*Record ceased.*	,, (Springfield).
Godstone (Birchwood Ho.)—*Record impft.*	Caterham (Asylum).
	,, Valley.
	Ashstead Rectory.
	Woking (Horsell Vic.)
	Cobham (Leigh Hill House).
	,, (Faircroft).
	Caterham Junction (Tudor Cottage).
	Carshalton (Wallington).
	Croydon (Waddon House).
	,, (Katharine Street).
	Chertsey (Long Cross).
	East Molesey.
	Wimbledon (Sewage Works).
	Forest Hill (Border Lodge).

KENT (69).

Acrise—*Gauge moved.*
Tunbridge (Hadlow Park)—*Record imperfect.*
Canterbury (Chilham)—*Record ceased.*
Ramsgate (St. Augustine's)—*Record ceased.*
Bromley Common, S.E.—*Record ceased.*

Tunbridge (Clare House).
Sheldwich.
Canterbury (Burgate Street).
Aylesford (Preston Hall).
Birchington.
Chatham.
Rochester (Knights Place).

WEST SUSSEX (21).

Chichester (Westgate)—*5 in. Record ceased.*
Fernhurst [Haslemere]—*Record ceased.*

EAST SUSSEX (42).

Pevensey (Walls End Cottage)—*Observ. irreg.*
Buxted Park—*No reply.*

Hastings.
Mayfield (Woodleigh).
Wadhurst (Lower Cousley Wood).
East Grinstead.

HAMPSHIRE (59).

Southampton (Woolston Lodge)—*Observer left.*

I of Wight, Sandown (Belgrave Ho.)
" " Newport.
" " Ryde (St. Helen's).
Christchurch School.
Southampton (Netley).
" (Ordnance Survey Off.)
" (Westend).
Romsey (Broadlands).
Petersfield (Castle House).
Alresford (Arle Bury).
Andover (The Knoll).
Crondall (Warren Corner).
Hartley Grange.

We still require a station at Freshwater, or some other part of the western portion of the Isle of Wight.

BERKS (19).

Wallingford (The Castle)—*Record imperfect.*

Reading (East Thorpe).
Lambourne.
Maidenhead (Lowood).
Springlands [Henley-on-Thames].

HERTS (30).

Bushy Heath (The Laurels)—*No reply.*
Watford (Oaklands)—*Part of record lost.*
Hatfield (Brockett Hall)—*No reply.*

Rickmansworth.
Broxbourne.
Gt. Berkhampstead (Gt. Gaddesden)
Hertford.
Ware (Fanham's Hall)

BUCKINGHAM (15).

	Greenlands [Henley-on-Thames].
	Olney (Filgrave Rectory).

OXFORD (25).

	Henley-on-Thames (Nettlebed).
	Oxford (Toot Baldon).
	Bicester (Middleton Park).
	Chipping Norton (Kingham).

NORTHAMPTON (26).

Thorpe Mandeville [Banbury]—*Observer left.*	Towcester (Whittlebury).
Rothwell—*Record imperfect.*	Maxey Vic. [Market Deeping].

HUNTINGDON (5).

Huntingdon (Wistow)—*Record imperfect.*	

BEDFORD (18).

Woburn (Hulcote Rectory)—*Record imperfect.*	Luton.
	Ampthill (Millbrook).

CAMBRIDGE (31).

Cambridge (Fulbourn Asylum)—*Record lost.*	Chatteris (The Priory).
Caxton (Papworth Everard)—*No reply.*	,, (Slade Farm).
Ely (Littleport, Audley House)—*Observ. irreg.*	

ESSEX (32).

Chigwell Row—*Record ceased.*	Walthamstow (Prospect Hill Ldg.)
	Chelmsford (Great Baddow).
	Witham (Little Braxted Hall).
	Dunmow (New Street).
	Dedham (Lower Park).

SUFFOLK (38).

	Lavenham Hall.
	Woodbridge (The Grange).
	Stradbroke.
	Botesdale (Rickinghall Rect).
	Weybread Vic. [Harleston].

NORFOLK (52).

Long Stratton (Hapton)—*Record imperfect.*	Downham Market (W. Dereham).
Watton (Ovington)—*Observer dead.*	Stoke Ferry (Wereham).
Fakenham (Colkirk)—*Record ceased.*	Yarmouth (Dene Side).
	,, (Rollesby).

WILTS (50).

Broad Chalke Vicarage—*Observer dead.*	Mere.
Malmesbury (MinetyHouse)—*Gauge blown over.*	,, (Down).
,, (Charlton Park)—*Record impfct.*	Hindon (Chicklade).
	Winterslow.
	Maiden Bradley.
	Amesbury.
	Warminster (Downside).
	Ludgershall (Everleigh).
	Market Lavington.
	Trowbridge (Wingfield).
	Bradford (2 *staotins*).
	Buttermere.
	Burbage (Wolfhall).
	Shalbourne.
	Durley.
	Great Bedwyn.
	Lye Hill.
	Devizes (Shepherd's Shore).
	Ramsbury.
	Ogbourne Maizy.
	Broad Hinton.
	Wootton Bassett.
	Malmesbury.

It may at first be thought that this long list of additions rather proves the strength of Mr. Preston's influence and enthusiasm than is a necessary addition. But if our readers will mark the whole of the stations on a map of the county, they will find that as a general rule they are none too close; nay, that a few others which Mr. Preston has established during 1882, will also be useful. There are 1,367 square miles in the county, and there are 50 stations, therefore, on the average, each station has 27 square miles to represent—quite sufficient for each to do.

DORSET (17).

Bridport (West Street)—*Record imperfect.*	Wareham (Castle Gardens).
	Westbourne [Bournemouth].
	Wimborne (West Boro').

DEVON (83).

Teignmouth (Bitton)—*Gauge moved.*	Kingsbridge (Ringmore).
Tavistock (Kilworthy Lane)—*Record ceased.*	Abbots Kerswell (Court Grange).
Budleigh Salterton—*Gauge moved.*	Teignmouth (Marine Villa).
Starcross (Southbrook)—*No reply.*	Tavistock (Kelly College).
Seaton (White Cliff Glen)—*Observer dead.*	Axminster.
	Hatherleigh (Broomford Manor).
	Churchstanton.

The Dartmoor district has received no additions, and still needs more attention.

CORNWALL (41).

St. Austell (Cosgarne)—*No reply.*	Helston.
Tintagel (St. Nectan's Glen)—*Observer dead.*	Penzance (Regent Terrace).
	Falmouth (2 *stations*).
	St. Just.
	Truro (Porthgwidden).
	Saltash (Lanhydrock).
	North Tamerton [Holsworthy].

SOMERSET (40).

Wiveliscombe—*No reply.*	Wellington (Sunnyside).
Taunton (Bishops Lydeard)—*Record imperfect.*	Ilchester (Chilton Cantelo).
Dunster (The Rectory)—*Observer ill.*	Dulverton (Skilgate).
Bristol Docks—*Record imperfect.*	Somerton (Butleigh).
	Bridgwater (Ashford).
	Watchet (Williton).
	Frome (Rock House, Mells).
	Chewton Mendip (Ston Easton).
	East Harptree (Harptree Court).
	Weston-super-Mare.
	Yatton (Chelvey).
	Wraxall (Naish House).

The representation of this county is greatly improved by this rather long list of insertions, which strengthens it in almost all parts; in Exmoor, in the S.E., on the Mendips, and in the extreme N.W.

GLOUCESTER (43).

	Chipping Sodbury(Stanshaws Crt.)
	Fairford (Park Farm).
	Cirencester (Further Barton).
	Stroud (Brinscombe Vic.)
	Coleford (The Coombs).
	Cheltenham (Montpellier Lodge).
	Moreton-in-Marsh (Longborough).

HEREFORD (21).

Ross (Rocklands)—*Observer dead.*	Ledbury (Orchardleigh).
	,, (Putley Court).
	Hereford (Burghill, Portway).

SHROPSHIRE (20).

Burford House—*Record imperfect.*	Broseley (Benthall Hall).
Market Drayton (Adderley)—*Record imperfect.*	Shrewsbury(OnslowHall) 2 *gauges.*

STAFFORD (33).

Weaver Hills (Beacon Stoop)—*Record doubtful.*	Wolverhampton Park.
Leek (Rudyard)—*Record incorrect.*	Weston Park [Shifnal].
	Longton (The Meir).
	Burslem.
	Leek (Wall Grange)—2 *gauges.*

We last year called attention to the small amount collected by Mr. Wragge's gauge on Beacon Stoop. He put up a second for 1882, and it collected so very much more than the old one, as to confirm the impression which we previously held, that the first one was badly placed. As the new one is not perfect for 1882, we are reluctantly obliged to omit both.

WORCESTER (26).

Little Malvern (The Farm).
Evesham.
Worcester (Hawford Lodge).
Redditch.
Stourport (Areley Court).
Moseley [Birmingham].

WARWICK (24).

Warwick (Barford Rect.)
,, (Priory Gardens).
Leamington (Thickthorns).
Birmingham (Bloomsbury Street).

LEICESTER (20).

Bruntingthorpe—*Observer left.*

RUTLAND (7).

Tolethorpe Hall [Stamford]—*Record imperfect.*
Burley-on-the-Hill.

LINCOLN (49).

Wainfleet (Skegness)—*Record imperfect.*
Grantham (Saltersford).
Boston Church Tower.
Lincoln (Brayford Wharf).
Horncastle (Hemingby).
Alford (The Sycamores).
Grimsby (Riby).

NOTTS (31).

Nottingham (Highfield House)—*Observer left.*
Southwell—*No reply.*
Mansfield (Grove House)—*Observer left.*
Ollerton (Whitemoor House)—*Observer ill.*
Retford (Babworth)—*Observer dead.*
Thrumpton Hall.
Cropwell Bishop(Cropwell Grove).
,, ,, (CropwellButler).
Nottingham (Park Hill).
,, (Mapperly Hill).
East Bridgford.
Eastwood.
Greasley (Moorgreen).
Annesley Park.
The Gardens [Bawtry Hall].

DERBY (40).

Belper (Fernslope)—*No reply.*
,, (Field Head Ho.)—*Gauge moved.*
Melbourne.
Derby (Elvaston).
Wirksworth (Biggin).
Chesterfield Gas Works.

CHESHIRE (47).

Chester (Christleton Hall).
Lymm (Agden Hall).
Altrincham (Norman's Place).
Sale (Brooklands).

LANCASHIRE (134).

Rochdale (Drake Street)—*No reply.*
Blackburn(PrestonNew Road)—*Record ceased.*
Bacup (Holmes)—*Gauge bad.*
Burnley (Palace House)—*Record ceased.*
,, (Gawthorpe Hall)—*Record imperfect.*
Galgate—*Observer unknown.*
Broughton-in-Furness(WoodlandRect.)*R.imp.*
Bridge End [Little Langdale]—*Observer dead.*
Brathay Hall [Ambleside]—*Record ceased.*

Liverpool (Roseleigh, Woolton).
Heaton Moor [Stockport].
Liverpool (St. James's Mount).
Manchester (Withington).
,, (Stretford).
,, (Ashfield Pendleton).
Rochdale (Castleton Vicarage).
,, (Park Observatory).
Over Darwen (Hoddlesden Res.)
The Hall [Todmorden].
Blackburn (Store Yard).
Accrington (Washington House).
Burnley (Mechanics Inst.)
,, (Extwistle Moor).
,, (Hey Slacks).
Whalley (Sabden).
Clitheroe (Low Moor).
Wray.
Ulverston (Urswick).

YORK, WEST RIDING (167).

Rotherham (Dinnington Hall)—*No reply.*
Wakefield (Thornes)—*No reply.*
Shipley (Eldwick)—*Record ceased.*
York (Copmanthorpe Vic.)—*Record ceased.*
Skipton (Thorpe Fell, Barden)—*Record impft.*
Settle—*Record imperfect.*

Sheffield (Nether Edge).
,, (Tylecote, Ranmoor).
Bolsterstone (Waldershaigh).
Standedge (Red Brook).
Meltham (Harewood Lodge).
Doncaster (Burghwallis Rect.)
Huddersfield (Bank Field, Golcar).
,, Cemetery.
Pontefract (Fern Hill).
Leeds (Methley Park).
Bradford (Stairs).
,, (Leeming Res.)
Leeds (Woodhouse Cliff).
Shipley (Esholt Vic.)
Bingley (The Grange).
Ilkley (Myddelton Lodge).
Skipton (*Craven Herald* Office).
Slaidburn (Cabin Hill).
York (Cherry Hill).
Settle (Clapham).
Ingleton (Chapel-le-Dale).
Oughtershaw (Swarthghyll).
Sedbergh (Long Lane).

YORK, EAST RIDING (22).

Hull (Nelholme, Ferriby)
,, (Spring Bank).
Beverley (Tickton).
Catton Rectory [York].
Driffield.

YORK, NORTH RIDING (36).

Bishopdale (Kidstones)—*Observer moved.*	Helmsley.
Thirsk.—*No return.*	Northallerton (Rounton Grange).
Hambleton Hills (Nab Farm)—*No return.*	Red Gill [Brough].
,, ,, (Lime Kiln House)—*No retn.*	Balder Head [Brough].
Hawes (Lunds)—*Gauge moved.*	
Lofthouse (Grinkle Park)—*No reply.*	
Mile Rigg [Brough]—*Record ceased.*	
Lune Head [Brough]—*Record imperfect.*	

We have one great gain to set against two especial losses. We have for years been wishing for records from Helmsley or its neighbourhood, and at last we have them. The principal losses are the gradual diminution of Mr. Stow's corps in the upper watershed of the Ure, and the absence of three of Mr. Bamlett's records from the vicinity of Thirsk.

DURHAM (20).

Sunderland (The Limes)—*Record imperfect.*	Seaham Harbour.
Gateshead (Eighton Cottage)—*Record imperft.*	Knitsley (Shotley Bridge).

NORTHUMBERLAND (47).

Shotley Hall—*Record ceased.*	Haydon Bridge (Ridley).
North Shields (Wallsend)—*Record imperfect.*	North Shields (Monkseaton).
Bellingham (Hesleyside)—*No reply.*	Newbrough.
Rochester (Byrness)—*Observer left.*	Cramlington.
	Morpeth (Earsdon).

CUMBERLAND (56).

Esk Hause—*Record ceased.*	Egremont (Calder Abbey).
Taylors Gill—*Record ceased.*	Whitehaven (The Flosh, Cleator).
Rosthwaite (Castle Lodge)—*Record imperfect.*	Keswick (Shu le crow).
Cockermouth (DerwentHouse)—*Observer dead.*	

WESTMORELAND (35).

Ullswater (Swarth Fell)—*Record imperfect.*	Elterwater (Lingmoor).
Lowther Castle [Penrith]—*No reply.*	

MONMOUTH (15).

Caerleon (Lansoar)—*Observer dead.*	Pontypool (Trevethin Vic.)
Monmouth (Dingestow Court)—*Observer dead.*	Blaenavon (Gas Works).
	Tredegar (The Willows).
	,, (Ebbw Vale).

GLAMORGAN (19).

Ystalyfera—*No observations.*	Ystalyfera (Tan-y-rallt).

CARMARTHEN (6).

PEMBROKE (10).

CARDIGAN (4).

Lampeter (St. David's Coll.)—*Record imperft.*	Waenbwll [Machynlleth].

BRECKNOCK (9).

Brecknock (Christ's College)—*No reply.*	Brecknock (Cantreff Rect.)
	,, (Llandefaelog-fach Rect)
	Newbridge (Llysdinam).

RADNOR (2).

MONTGOMERY (14).

Garthbibio (Rhos-y-perfedd)—*Record impft.*

FLINT (7).

| Halkyn.

DENBIGH (16).

Abergele (Kinmel Park)—*No reply.*

| Denbigh (Glan-y-wern).
| Llangerniew (Hafodunos).

MERIONETH (9).

Towyn (Peniarth)—*Observer left.*

CARNARVON (10).

| Llandwrog (Glynllivan Park).

ANGLESEA (6).

| Bodewryd (Rhosybol).

ISLE OF MAN (10).

| Calf of Man (Chickens Rock).
| Castletown (Langness).
| Port Erin.
| Douglas (Clypse Onchan).
| Kirkmichael (Druidale).
| ,,

For almost the whole of these important additions we are indebted to Mr. A. W. Moore, of Cronkbourne. The record from Druidale is the first ever obtained in the hilly part of the Island.

ISLES OF SCILLY (1).

JERSEY (3).

GUERNSEY (4).

Guernsey (York Place)—*Record ceased.*

| Guernsey(Les Ruettes Brayes) 2 *g*

SCOTLAND.

WIGTON (4).

| Garliestown (Galloway House).

KIRKCUDBRIGHT (10).

New Abbey (St. Mary's)—*Gauge leaky.*
New Galloway—*No reply.*

| New Galloway (Glenlee).

DUMFRIES (10).

Annan (Warmanbie)—*Observer left.*
Sanquhar (Wanlockhead)—*Observer left.*

| Ecclefechan (Springkell).
| Langholme (Burnfoot, Ewes).
| Durrisdeer (Tudhope).

ROXBURGH (13).

| Melrose (Asylum).

SELKIRK (3).

PEEBLES (4).

BERWICK (5).

| Coldstream (Milne Graden).
| Dunse.
| St. Abb's Head.

HADDINGTON (4).

North Berwick(Seacliffe)—*Return not received.* | Haddington (Asylum).

EDINBURGH (23).

Pentland Hills (Logan Lea)—*Record imperfect.* | Moorfoot Hills (Bowbate).
Mid Calder (New Park Ho.)—*Return not recd.* | West Calder (Addiewell).
Leith—*Return not received.*

LINLITHGOW (1).

Linlithgow (Rockville)—*Return not received.* | Bathgate.

LANARK (13).

| Coatbridge (Lochwood).
| Glasgow.

AYR (13).

| Girvan (Almont).
| Ayr (Cassillis).
| Ardrossan (Kirkhall).
| Wemyss Bay (Kelly Gardens).

RENFREW (22).

| Castle Semple Gardens.
| Stanely.
| Paisley(Ferguslie House).

DUMBARTON (6).

| Balloch Castle.

STIRLING (5).

BUTE (4).

The Isle of Arran is more than half as large as Middlesex; it contains 165 square miles; but at present furnishes only two lighthouse records. One or two ordinary stations would be very useful.

ARGYLL (34).

Loch Sunart (Glen Borrodaile)—*Recrd. impft.* | Ardnamurchan (Achateny).
| Loch Eil (Conaglen).
| Jura (Bay of Small Isles).

CLACKMANNAN (1).

KINROSS (2).

| Kinross (Turfhills).

FIFE (14).

Cupar (Kemback)—*Observer left.*	Isle of May.
St. Andrew's (Castle Cliff)—*Ret. not received.*	Kilconquhar (Balcarres).
	Cupar.
	St. Andrew's (Priory).
	,, ,, (Newton Bank).

PERTH (25).

Callander (Leny)—*Record imperfect*	Coupar Angus Station.
Perth (Academy)—*Record ceased.*	Aberfeldy H.R.S.
,, (Inchbank)—*Record ceased.*	
Errol (Fingask Castle)—*Record imperfect.*	
Dunkeld H.R.S.—*Record imperfect.*	

FORFAR (12).

Dundee (Westfield Cottage)—*Record ceased.*	Montroseness.

KINCARDINE (3).

	Girdleness.

ABERDEEN (21).

Monymusk (Cluny Castle)—*Observer left.*	Aberdeen (King's College).
	New Deer (Artamford Cottage).
	Old Deer Manse.

BANFF (1).

Tomintoul—*No reply.*	

A very serious loss, leaving the south of the county without a station.

ELGIN (7).

	Covesea Skerries.

NAIRN (2).

ROSS, WEST (13).

	Auchnasheen H.R.S.

ROSS, EAST (7).

Dingwall H.R.S.—*Record imperfect.*	Cromarty.
Tain (Fearn)—*Gauge moved.*	Edderton.
	Tarbetness.

INVERNESS WEST (15).

Loch Shiel (Kinlochmoidart)—*Observer dead.*	Moidart (Roshven).
Skye (Portree)—*No reply.*	Loch Shiel (Glenaladale).

Some additional stations in this district are greatly needed, especially near Fort Augustus, and in Glen Moriston.

INVERNESS EAST (7).

Roy Bridge (Brae Lochaber)—*Observer moved.*	Strath Errick (Farraline).
	Inverness (High School).

SUTHERLAND (11).

Lairg H.R.S.—*Record imperfect.*	Assynt (Achumore).
Kinbrace (Achintoul)—*Record imperfect.*	Stourhead.
Tongue House—*Record imperfect.*	Kinbrace H.R.S.

Stourhead has formerly, erroneously, been grouped in Shetland.

CAITHNESS (7).

| Dunnethead.

ORKNEY (10).

SHETLAND (3).

Stourhead—*See Sutherland.*
East Yell—*No reply.*

IRELAND.

We regret to be without any return from either Kildare or Roscommon.

CORK (7).

Queenstown (Altavilla)—*Record imperfect.*
Cork (Newsom's Quay)—*Observer moved.*

| Cork (Sunday's Well Road) 2 *yes.*

KERRY (8).

Castlemaine (Keel House)—*Observer dead.*

| Killarney.

We are not quite sure whether the establishment of the record at Killarney originated with the observer, the Rev. G. R. Wynne, or with Mr R. H. Scott, F.R.S., but in either case we are extremely glad to have the return, and hope that it may be speedily followed by one or two others from that interesting district.

WATERFORD (5).

TIPPERARY (8).

| Fethard (Mobarnane).
| Nenagh (The Lodge).

LIMERICK (3).

| Newcastle West.

CLARE (4).

WEXFORD (3).

New Ross (Horetown House)—*Observer dead.*
Enniscorthy (Castle Boro')—*Observer left.*

KILKENNY (4).

Tullogher [New Ross]—*Observer moved.*

| Lavistown.

WICKLOW (1).

Bray (Florence Terrace)—*Observer left.*

This county sadly needs additional particulars. We believe that there are several gauges kept for the Dublin Corporation Waterworks, and shall be glad if any correspondent can obtain copies for us.

CARLOW (3).

KILDARE (*No station*).

QUEEN'S COUNTY (1).

Stradbally (Polesbridge)—*No reply.*

KING'S COUNTY (5).

DUBLIN (6).

MEATH (4).

Moynalty (Westland).

WESTMEATH (2).

Athlone (Twyford).

LOUTH (4).

LONGFORD (1).

GALWAY (8).

Gort (Cregg Park)—*Observer dead.*
Galway (Queen's College)—*Record imperfect.*

Shannon Grove [Banagher].

MAYO (4).

ROSCOMMON (*No station*).

SLIGO (4).

LEITRIM (1).

CAVAN (3).

Belturbet (Red Hills).

FERMANAGH (4).

MONAGHAN (1).

ARMAGH (5).

Lurgan (Belle Vue).

DOWN (15).

ANTRIM (7).

BELFAST.

Antrim Road—*Record imperfect.*

LONDONDERRY (10).

Londonderry Asylum—*No reply.*

Londonderry (Clooney Terrace).
,, (Creggan Res.

TYRONE (7).

Dungannon (Donaghmore)—*Record ceased.*
,, (Allan Rock)—*Gauge moved.*

DONEGAL (10).

Lough Eske—*No reply.*
Ramelton (Ballyare)—*Record ceased.*

Dunfanaghy.

SUMMARY.

We are now in a position to state precisely the number of perfect records obtained for 1882, and this we will first do in a table, adding for comparison the numbers in 1861, 1871, and 1881.

Number of perfect rainfall records published in the volumes of British Rainfall for the undermentioned years:—

Years.	England.	Wales.	Scotland.	Ireland.	Total.
1861.....	334	9	109	20	472
1871.....	1038	88	311	67	1504
1881.....	1548	131*	313	153	2145
1882.....	1710	145	335	148	2338
Difference—					
Increase..	162	14	22	—	193
Decrease.	—	—	—	5	—

These figures prove several facts: they show the tendency of the number of observers to increase faster in England than in other parts of the British Isles, and this in spite of great efforts on our part to preserve the balance. Seeing, however, the excess of population, of agriculture, and of water-user in England, there is perhaps no great harm in the excess. But we hope that those of our readers who have shooting or fishing quarters in the Highlands or in Ireland will see if they can help us to obtain additional records from out-of-the-way localities. It is scarcely possible to render greater services to the rainfall cause than by such assistance.

* Wrongly added last year, and printed as 141 on p. 67 of *British Rainfall*, 1881, and reprinted on p. 10 of this volume.

OBITUARY.

We are sorry to have to record a rather large number of losses during the past year. Several of our correspondents, however, as seems to be frequent with rainfall observers, passed away at a very advanced age. We know the ages of very few, but among those few were two at 83, one at 88, and one at 91.

As regards continuity, our most serious losses are probably those of Judge Herbert, of Rocklands, Ross, and Dr. Moffat, of Hawarden, Flint—one of whom began his record in 1850, and the other in 1852—for both records have ended with the death of the respective observers. The older register of Mr. Brown, of Cirencester, is fortunately continued by his daughter.

Among other important losses we must mention that of Mr. Bosanquet, of Dingestow Court, Monmouth, which leaves a very large district without an old-established station. Dr. Dodgson, of Cockermouth, is also a great loss, as besides his regular observations he made various and useful experiments.

As regards the majority of the other stations we have the great satisfaction of seeing the entry followed by the C, indicative of the continuation of the record.

Only two names have the prefixed *, which denotes that they were among the little band of contributors to *English Rainfall*, 1860.

Our most serious loss is that of a contributor who scarcely ever took an observation, but who nevertheless rendered great service to our cause. We allude to Mr. Maitland, a Londoner, who loved to spend his leisure in rambling among the Cumberland hills, who, after the death of our friend and helper, Isaac Fletcher, M.P., F.R.S., took upon himself the cost and the care of Mr. Fletcher's mountain gauges, appointed an assistant as observer, paid his salary, procured new gauges, and saw them properly fixed; in a word, took to Mr. Fletcher's work and did it right well. Mr. Maitland's son has most kindly instructed the assistant to report direct to us until further orders, but it would be far better if some one in the district would take up the care, the cost, and the credit.

OBSERVERS DECEASED TO JUNE, 1883.	PERIOD OF OBSERVATION. DATE.	Perfect Yearly Records.
Bacon, G.M., Esq., M.D., Fulbourne Asylum, Cambs.	C 1876–81 C	6
Baker, W. B., Esq., Cain's Cross, Stroud	1875–80	6
Begbie, Mr. J. — Missenden Abbey	C 1862 imp –70 T	22
Begbie, Mr. J. — Dell Cottage, Gt. Missenden	C 1871–83 imp	
Bingham, Rev. Canon, Bingham Melcombe, Blandford	C 1869–80 T	12
Bosanquet, S.R., Esq., Dingestow Court, Monmouth	C 1867–81 T	15
Brown, T. C., Esq., Further Barton, Cirencester	C 1844–81 C	38
Brown, Mr. W., Bretby Hall, Burton-on-Trent	C 1860–82 C	23
Browning, Rev. W. T., Thorpe Mandeville, Banbury	C 1870–82 imp T	18
Bumpsted, Rev. Prebendary, Dinder, Wells, Somerset	C 1863 imp –77 T	15
Burleigh, R. W., Esq., Halesworth, Suffolk	C 1874 imp – 81 C	8
Byles, T. F. A., Esq. — Thamesfield, Henley	C 1864–72 T	18
Byles, T. F. A., Esq. — White Cliff Glen, Seaton, Devon	C 1871–81 T	
Byles, T. F. A., Esq. — St. Nectan's Glen, Tintagel	C 1881 T	
Capell, R., Esq., Weedon Beck, Northamptonshire.	C 1874–82 C	9
*Challis, Prof., F.R.S., Observatory, Cambridge.	1860–63 C	4
Clark, C., Esq., Westfield Cottage, Dundee.	C 1867–81 T	15
Dodgson, H., Esq., M.D. — Cockermouth	C 1861–72 T	22
Dodgson, H., Esq., M.D. — ,, Derwent House	C 1873–82 imp C	
Douglas, Mr. J., Babworth, Retford	C 1869–81 T	13
Doxat, H., Esq. — Clapham	C 1859–67 T	17
Doxat, H., Esq. — Holland Road, Kensington	C 1869–71 T	
Doxat, H., Esq. — Clare Lodge, Ealing	C 1876–80 imp T	
Doxat, H., Esq. — Wythegate, Staines	C 1880 imp T	
Evans, Rev. C. J., Ovington, Watton, Norfolk	C 1873 imp –82 imp T.	10
Farrar, Mr. J., Burbage Quarries, Sheffield	C 1871–82 T	12
Goff, S. D., Esq., Horetown Ho., New Ross, Ireland	1878–81 T	4
Greg, J., Esq., Escowbeck, Caton, Lancashire	1860–82 C	23
Herbert, J. M., Esq., J.P., Rocklands, Ross, Hereford	C 1852 imp –81 T	30
Hinnell, T.C., Esq., Abbeygate-st., Bury St. Edmunds	C 1860–82 C	23
Hope, G., Esq., Fenton Barns, Drem, Haddington.	1863–72 T	10
James, J., Esq., J.P., Llansoar, Caerleon, Monmouth	1874–81 T	8
Joyner, H. St. J., Esq. — Shortwood House, Staines	C 1866–68 imp T	12
Joyner, H. St. J., Esq. — Northwick House, Harrow	C 1868 imp –77 imp T	
MacDonald, W.R., Esq., Kinloch, Moidart, Inverness	C 1872 imp –81 T	10
Maitland, J., Esq., The Park, Loweswater	See previous page	
*Moffat, T. Esq., M.D., Hawarden, Flintshire	C 1850–80 T	31
Moore, Rev. C. G., Broad Chalke, Wiltshire	1881–82 imp T	2
Norton, J., Esq. — Lincoln	1869–74 T	11
Norton, J., Esq. — Carholme Villa, Lincoln	C 1877–81 T	
Nunes, Miss, Langtree Wick, Torrington, Devon	C 1872 imp – 78 C	7
Overton, G., Esq., Watton Mount, Brecon	C 1870 imp – 82	13
Scott, W., Esq., Barlaston, Stoke, Staffordshire	C 1865 imp –82 C	18
Stirling, J., Esq., Kippenross, Dunblane, Perthshire	C 1852 imp –82 C	31
Taylor, Rev. Hugh, Humshaugh, Northumberland	C 1872 imp –82	11
Thomas, Rev. W. S., Halse Rectory, Taunton	C 1876 imp – 82	7
Wemyss, Mr. G., The Gardens, Springwood Pk., Kelso	C 1854–82 C	29
Williams, Rev. W. W., Menaifron, Anglesea	C 1865 imp–74 imp T 1879–82	14

NOTE.—C indicates commencement of record and also its continuation, T its termination. No records are quoted unless they are perfect, and copied in our MS. volumes.

RAINFALL AND METEOROLOGY

1882.

ON THE METEOROLOGY OF 1882,

WITH NOTES OF SOME OF THE PRINCIPAL PHENOMENA.

[These Notes should be read in conjunction with those of Heavy Rains in 1882.]

JANUARY.

1st.—*Diss* (IV). Two peacock butterflies seen. — *Darlington, Whorlton.* (X). Very warm, min. temp. 45°.

1st and 2nd.—*Southend* (IV.) Gale.

2nd.—*Rendlesham Hall* (IV). S.W. gale.—*Diss* (IV). Strong gale from S.S.W.—*Ashburton, Druid* (V). Storm in night; heavy R, 1·08 in.—*Diglis Lock* (VI). W.N.W. gale.—*Loughborough* (VII). S.W. gale.—*Melton, Coston.* (VII). Very high wind and heavy R.—*Wakefield, Stanley.* (IX). Gale in the night.—*Whorlton,* (X). Gale from S.W., and rapid fall of bar.—*Dalnaspidal, H.R.S.* (XVI). Gale, with R and S.

2nd and 3rd.—*St. Leonards* (II). Gale from S.W.—*St. John's, Devonport* (V). W.S.W. gale.

3rd.—*Croydon, Addiscombe* (II). Fresh gale; max. velocity of wind in any hour 30 miles.—*Diss* (IV). Heavy gale in night.—*Torquay, Babbacombe* (V). Heavy S.W. gale.

4th and 5th.—*Elterwater, Woodlands* (X). Windy and wet; 3·09 in. of R in the two days.

5th.—*Worcester, Diglis Lock* (VI). Heavy S.E. gale.—*Loughborough* (VII). S.W. gale.—*Chesterfield, St. Thomas Rect.* (VII). Gale.—*Cahir, Tubrid* (XX). Very stormy.—*Belfast, New Barnsley* (XXIII). Very stormy, with showers.

4th 5th, and 6th.—*Miltown Malbay* (XX). Storm from N.W., with H and R.

5th and 6th.—*Shap* (X). Great gale.—*Newcastle West* (XX). Gale.

6th.—*Bromley Common* (II). Very mild; bees out.—*St. Leonards* (II). Gale from S.W. in early morn.—*Rendlesham Hall* (IV). Strong S.W. wind.—*Diss* (IV). Fresh gale, S.S.W.—*Calne, Compton Basset*

(V). Gale, with R.—*Torquay, Babbacombe* (V). S.W. gale.—*Ashburton, Druid* (V). Strong wind.—*Gloucester, Llanthony Lock* (VI). Stormy from S.W.—*Coston Rect.* (VII). High wind all day.—*Darlington, Whorlton* (X). High wind, with R and S.—*Elterwater, Woodlands* (X). Gale, with H and R. Wind 70 miles per hour at 11.50 a.m.—*Cardiff, Park Place* (XI). Stormy, with R.—*Melrose, Abbey Gate* (XII). Severe W. gale.—*Ayr, Cassillis House* (XIV). Severe S.W. gale.—*Loch Shiel, Glenaladale* (XVIII). Violent hurricane.—*Nairn, Cawdor* (XVIII). Very stormy, with R and S.—*Forsinard, H.R.S.* (XIX). Strong gale with R and sleet.—*Watten, H.R.S.* (XIX). Gale from W. —*Fermoy Gas Works* (XX). Very stormy.—*Newtownards* (XXIII). Violent gale in morning.—*Londonderry, Knockan* (XXIII). A very severe gale.—*Ramelton, Killygarvan* (XXIII). Violent W.S.W. gale, 5 a.m. to 2 p.m.

6th—8th.—*Lochbroom* (XVIII). Very stormy.

7th.—*Croydon, Addiscombe* (II). Duration of bright sunshine 6 hours.—*Calne, Compton Bassett* (V). T.—*Nottingham, Strelley Hall* (VII). Duration of sunshine 5·9 hours.—*Llanfrechfa Grange* (XI). High W. wind in early morn with TL and H.

8th.—*Diss* (IV). Fresh S.W. gale.—*Gloucester, Maisemore Lock* (VI). High W. wind and heavy R.—*Tewkesbury, Upper Lode* (VI). Stormy from S.W. with heavy R 1·04 in.—*Worcester, Diglis Locks* (VI). Heavy storms S.S.W.—*Llandovery* (XI). Gale and heavy R 1·42 in.—*Watten H.R.S.* (XIX). N.W. gale at night.

8th and 9th.—*St. Leonards* (II). Gale from S.W.—*Torquay, Babbacombe* (V). Heavy S.W. gale with R and H.

9th and 10th.—*Cawdor* [*Nairn*] (XVIII). Stormy with showers.

10th.—*Melrose, Abbey Gate* (XII). S.W. gale.

11th.—*St. Lawrence* (II). Yellow crocus in flower.

12th.—*Langton Herring* (V). Dense fog.—*Ashburton, Druid* (V). Dense fog on hills.—*Melton, Coston Rectory* (VII). Snowdrops in flower.—*Nottingham, Strelley Hall* (VII). Fog all day.

13th.—*Melrose, Abbey Gate* (XII). Snowdrops in bloom.

14th.—*Chesterfield, St. Thomas Rect.* (VII). Gale.—*Watten H.R.S.* (XIX). S.E. gale at night.—*Miltown Malbay* (XX). Strong gale from S.

16th—18th.—*Compton Bassett* (V). Continuous dense fog.

16th—19th.—*Southend* (IV). Continuous dense fog.

17th—19th.—*Crewkerne, Bincombe House* (V). Dense fogs.

[During the greater part of January the barometer was remarkably high, and in the southern portion of England, readings were above

30 in. from the 7th to the end of the month; the max. occurred on the 18th, and was above 30·9 in. over almost the whole of the country (for full particulars see *Quarterly Journal of the Meteorological Society*, April, 1882)].

18th.—*Croydon, Addiscombe* (II). Dense fog all day.—*Bromley Common* (II). Thick fog all day.—*Winslow, Addington* (III). Dense fog.—*Banbury, Wroxton* (III). Bar. pressure the highest observed during 33 years; dense fog.—*Cheltenham* (VI). Dense fog all day.—*Melton, Coston Rectory* (VII). Dense fog.—*Llanfrechfa Grange* (XI). Thick fog all day.

19th.—*Langton Herring* (V). Dense fog.—*Ashburton, Druid* (V). Dense fog all day.—*Nottingham, Strelley Hall* (VII). Fog all day.

24th.—*Watten, H.R.S.* (XIX). W. gale at night.

25th.—*Bromley Common* (II). Dense fog.—*Southend* (IV). Dense fog.—*Leyton Observatory* (IV). Dense fog.

26th.—*Ashburton, Druid* (V). Dense fog all day.

26th—28th.—*Chesterfield, St. Thomas Rect.* (VII). Stormy.

27th.—*Cahir, Tubrid* (XX). Very stormy with R and S.—*Newcastle West* (XX). Strong W.S.W. gale.

28th.—*Torquay, Babbacombe* (V). Solar and lunar halos.—*Melrose, Abbey Gate* (XII). Very stormy from S.W.

29th.—*Spilsby, Partney* (VII). Strong wind and heavy R in evening and night.—*Meltham, Harewood Lodge* (IX). About 14 in. of S fell, yielding 1·11 in.—*Shipley, Esholt Vic.* (IX). Heavy fall of S followed by R.

FEBRUARY.

3rd, 4th, and 5th.—*Ashburton, Druid* (V). Dense fog in valleys.

6th.—*Bromley Common* (II). Fog all day—*Ross, The Graig* (VI). Dense fog.

7th.—*Southend* (IV). Dense fog.—*Douglas, Victoria Rd.* (XI). Dense black fog, making it dark as night from 2 to 3 p.m.

8th.—*Tewkesbury, Upper Lode* (VI). Stormy from S.E.—*Newcastle West* (XX). S.W. gale in afternoon.

12th.—*Wakefield, Stanley Vic.* (IX). Gale in the night.—*Elterwater, Woodlands* (X). Very heavy R at night, 2·12 in.—*Cawdor, Nairn* (XVIII). Stormy, with R at night.—*Newcastle West* (XX). Blowing strongly from S.W.—*Miltown Malbay* (XX). Heavy southerly gale.

12th and 13th.—*Shap* (X). Storm of wind and R, causing a great

flood; 2·67 in. of R in the two days.—*Fermoy, Gas Works* (XX). Stormy.—*Ramelton, Killygarvan* (XXIII). S.W. gale.

13th.—*Torquay, Babbacombe* (V). S.W. gale.—*East Layton, Darlington* (IX). N.E. gale, with R.—*Whorlton* (X). Gale from W., with R.—*Melrose* (XII). Gale from S.W.—*St. Andrews* (XVI). Strong gale from W.—*Lochbroom* (XVIII). Very stormy.

14th.—*Diss* (IV). Heavy snowstorm.—*Ashburton, Druid* (V). Gale, with torrents of R at night.—*Tewkesbury, Upper Lode* (VI). Stormy from S., with heavy R.—*Shap* (X). Strong gale all day.—*Miltown Malbay* (XX). N.W. gale, with S., the first fall of the year.

14th and 15th.—*Watten, H.R.S.* (XIX). Stormy from W., with R and sleet.

15th.—*Muswell Hill* (I). Tremendous squall of wind and R; about 8.20 a.m., the wind veered from S.W. to N.W. and the temp. fell 6° in a few minutes, and 10° between 8 and 9 a.m.—*Dorking, Abinger Hall* (II). Stormy.—*Croydon, Addiscombe* (II). Fresh gale, max. velocity of wind in any hour 26 miles.—*St. Leonards* (II). S.W. gale.—*Torquay, Babbacombe* (V). S.W. gale.—*Spilsby, Partney* (VII). A little S, the first of the winter.—*Llanfrechfa Grange* (XI). Violent scud of wind, R, and S at 0.30 p.m.

16th.—*Langton Herring* (V). Parhelia seen.—*Melrose* (XII). Gale from W.

16th and 17th.—*Gloucester, Maisemore* (VI). Gales from W. and S.W.

18th.—*Whorlton* (X). Gale from W.—*Shap, Copy Hill* (X). Gale, with heavy showers.—*Melrose, Abbey Gate* (XII). Gales from S.W.—*Dollar* (XVI). Stormy.—*St. Andrew's* (XVI). Heavy gale from W.N.W.—*Tain, Springfield* (XVIII). Hurricane from S.—*Loch Shiel, Glenaladale* (XVIII). Full gale from S.W.—*Cawdor, Nairn* (XVIII). Stormy, with showers.—*Forsinard, H.R.S.* (XIX). Gale, with heavy R.—*Watten, H.R.S.* (XIX). Very stormy at night from N.N.W.—*Ramelton, Killygarvan* (XXIII). N.W. gale, with R.

19th.—*Croydon, Addiscombe* (II). Duration of sunshine 7·3 hours.

20th.—*Torquay, Babbacombe* (V). Very high bar., 30·923 in.

24th.—*Diss* (IV). Heavy gale.—*Cahir, Tubrid* (XX). Gale at night.

24th and 25th.—*Stourport, Lincomb Lock* (VI). Stormy from S.W.

25th.—*St. Leonards* (II). S.W. gale; lunar halo.—*Rendlesham* (IV). S.S.W. gale.—*Diss* (IV). Gale from S.W.; heavy at night.—*Gloucester, Maisemore* (VI). S.W. gale.—*Whorlton* (X). Stormy from S.,

with great fall of pressure.—*Shap* (X). Very heavy R (2·19 in.), and floods.—*Builth, Abergwessin Vic.* (XI). Very stormy, with heavy R.

25th and 26th.—*Littlehampton* (II). Stormy from S.E. and S.W. —*Torquay, Babbacombe* (V). S.W. to S. gale.—*Cheltenham* (VI).—Gale, with R.

25th to 28th.—*Tewkesbury, Upper Lode* (VI). Stormy from S. and S.W.

26th.—*St. Leonards* (II). S.W. gale.—*Droitwich, Holt Lock* (VI). Stormy from S.W.—*Chesterfield, St. Thomas* (VII). Gale.—*Lochbroom* (XVIII). Very stormy.—*Watten, H.R.S.* (XIX). Stormy from N.E., with R and S.

27th.—*Diss* (IV). Gale from E.

27th to 28th.—*Abinger Hall* (II). Very stormy.

28th.—*Canterbury, Harbledown* (II). S.E. gale.—*St. Leonards* (II). S.E. gale.—*St. Lawrence* (II). Gale and R.—*Diss* (IV). Gale from S.W.—*Gloucester, Maisemore* (VI). Gale from W.—*Stourport, Lincomb Lock* (VI). Stormy from S.W.—*Builth, Abergwessin Vic.* (XI). Very stormy.—*Dollar* (XVI). Stormy, with sleet.—*Newcastle West* (XX). Stormy from N.E, backing to N.

MARCH.

1st.—*Muswell Hill* (I). Squall of wind and R at 7 a.m. with rapid fall of temp.—*Canterbury, Harbledown* (II). Blowing hard from S.W. with heavy showers.—*Littlehampton* (II). Squally with H and R.—*Alton, Ashdell* (II). T and L.—*Rendlesham Hall* (IV). Strong S.W. wind.—*Torquay, Babbacombe* (V). W. gale.—*Ashburton, Druid* (V.) Storm of wind, R and H.—*Gloucester, Llanthony Lock* (VI). Stormy from S.W.—*Maisemore Lock* (VI). W. gale.—*Stourport, Lincomb Lock* (VI). Stormy from S.W.—*Dollar* (XVI). Stormy with sleet.—*St. Andrews* (XVI). Heavy gale from E.—*Lochbroom* (XVIII). Very stormy with S and sleet.—*Miltown Malbay* (XX). Storm from N.W. —*Ramelton, Killygarvan* (XXIII). E. gale.

1st and 2nd.—*St. Leonards* (II). Gale from S.W.—W.S.W., with H. —*Watten, H.R.S.* (XIX). Storm of wind from E.

2nd.—*Torquay, Babbacombe* (V). W.S.W. gale.—*Llanfrechfa* (XI). Heavy storm from S.W. with R.—*Builth, Abergwessin Vic* (XI). Very stormy with sleet.

5th.—*Littlehampton* (II). Very squally with driving R.—*Torquay, Babbacombe* (V). W.S.W. gale.

6th.—*Torquay, Babbacombe* (V). Solar and lunar halos.—*Lochbroom* (XVIII). Very severe snowstorm.—*Forsinard H.R.S.* (XIX). High wind with S and sleet.—*Watten, H.R.S.* (XIX). S.E. gale at night.

7th.—*Dollar* (XVI). S 4 in. deep.—*St. Andrews* (XVI). Westerly gale with S.—*Lochbroom* (XVIII). Severe storm with heavy R (2·09 in.) and floods.

8th.—*East Layton* [*Darlington*] (IX). Gale.—*Whorlton* (X). Gale from S.W.—*Shap* (X). Great storm of wind and R.—*Melrose* (XII). Very severe S.W. gale.—*Ramelton, Killygarvan* (XXIII). Gale all day from W.

10th.—*Whorlton* (X). Strong gale from S.W.—*Melrose* (XII). Gale from S.W.

16th.—*Nottingham, Strelley Hall* (VII). Duration of sunshine 10·5 hours.—*Watten, H.R.S.* (XIX). N.W. gale.

18th.—*Torquay, Babbacombe* (V). Parhelion.

19th.—*Croydon, Addiscombe* (II). Duration of sunshine 10 hours.

20th.—*Stourport, Lincomb Lock* (VI). Stormy from N.W.—*Miltown Malbay* (XX). N.W. gale, with S and H.

21st.—*Diss* (IV). Squally with H.—*Llandovery* (XI). Heavy S and H storms, hailstones as big as marbles.—*Port Madoc* (XI). W.N.W. gale.—*Melrose* (XII). Fine aurora.—*Forsinard, H.R.S.* (XIX). Gale with S.—*Miltown Malbay* (XX). Fierce N.N.W. gale with S and H.

22nd.—*Dorking, Abinger* (II). Very stormy from N. with S.—*Littlehampton* (II). Very squally, with S, H and R.—*Rendlesham Hall* (IV). Strong N.W. wind, with S, sleet and H.—*Beccles, Ellough* (IV). Heavy storm of H.—*Diss* (IV). Gale from W. by N. with S.—*Coston* (VII). Very high gale.

24th.—*St. Andrews* (XVI). S.W. gale.—*Newcastle West* (XX). Gale from N.W. in morning.—*Dowra* (XXIII). Very stormy from W.

25th.—*Oxford, Magdalen College* (III). High wind, with R, S and H.—*Torquay, Babbacombe* (V). W.S.W. gale.—*Maisemore Lock* (VI). W. gale.—*Diglis* (VI). S.W. gale and R.—*Ketton Hall* (VII). Very stormy at night with S and R.—*Nottingham, Strelley Hall* (VII). Heavy R and S.—*Cahir* (XX). Gale and heavy R at night.

26th—*Muswell Hill* (I). Heavy R in early morning, with violent storm of wind from N.N.W., temp. fell 12° in little over one hour.—*St. Leonards* (II). Gale from N.N.W., with sleet and L at night.—*St. Lawrence* (II). N.W. gale.—*Rendlesham Hall* (IV). N.W. gale.—*Compton Bassett* (V). Strong N.W. gale in morning.—*Torquay, Babbacombe* (V). N.W. gale.—*Stourport, Lincomb Lock* (VI). Stormy from

S.W.—*Port Madoc* (XI). N. gale.—*Lochbroom* (XVIII). Gale and R. —*Newcastle West* (XX). Gale in morning with sleet and H.

26th to 29th.—*St. Andrews* (XVI). Westerly gales.

27th.—*Torquay, Babbacombe* (V). Parhelion and lunar halo.

28th.—*Elterwater, Woodlands* (X). Gale and heavy R.—*Miltown Malbay* (XX). Strong gale with H.

29th.—*Whorlton* (X). Gale from S.W.—*Ballinasloe, Kilconnell* (XXII). S.W. gale.

30th.—*Croydon, Addiscombe* (II). Max. temp. in sun 114°·9, unusually high.—*Alton, Ashdell* (II). Heavy storm of H.—*Oxford, Magdalen Coll.* (III). Hailstorm.—*Maisemore Lock* (VI). Thunder shower.

APRIL.

1st.—*Cahir* (XX). Stormy from S.E.—*Miltown Malbay* (XX). T.

2nd.—*Banbury, Wroxton* (III). T.

2nd and 3rd.—*Miltown Malbay* (XX). S.E. gale, with H and R.

5th.—*Enfield* (I). L.—*St. Leonards* (II). L at night.—*Addington* (III). L at night.

6th.—*Abinger* (II). Dense fog early.

9th.—*Pinner Hill* (I). First swallow seen.

12th.—*Ashburton, Druid* (V). Heavy storm in night, with 1·21 in. of R.—*Ramelton, Killygarvan* (XXIII). E.S.E. gale at night.

12th to 15th.—*Crewkerne, Bincombe House* (V). Heavy TSS.

13th.—*St. Lawrence* (II). Gale.—*Torquay, Babbacombe* (V). W.S.W. gale.—*Stourport, Lincomb Lock* (VI). Stormy from S.—*Liverpool, Walton-on-the-Hill* (VIII). T, L, and R.—*St. Andrews* (XVI). Strong E. wind, and heavy R, 1·90 in.

13th and 14th.—*St. Leonards* (II). S. to S.W. gale.—*Melrose* (XII). Stormy from N.E.—*Glenaladale* (XVIII). Gale from E.

14th.—*Shap* (X). R, S, sleet, and H, and a heavy fall of S on the mountains, which remained for three or four days.—*Miltown Malbay* (XX). Very cold, gale from S.W.

14th and 15th.—*Cahir* (XX). S on the hills.

15th.—*Croydon, Addiscombe* (II). TS.—*Littlehampton* (II). T and L. —*Wimborne Minster, Chalbury* (V). About 3 p.m. a contracted whirlwind passed rapidly through a part of this parish, carrying away almost every loose thing.—*Torquay, Babbacombe* (V). Solar halo.—*Llanfrechfa* (XI). T and L at noon.—*Watten, H.R.S.* (XIX). S 4 in. deep.—*Miltown Malbay* (XX). Bitterly cold ; gale from N.E.

16th.—*Keith, H.R.S.* (XVII). S 3½ in. deep.—*Glenaladale* (XVIII).

Heavy fall of S, about 14 in.—*Aviemore, H.R.S.* (XVIII). S 9 in. deep.

17th.—*Port Madoc* (XI). Storm from N.

18th.—*Torquay, Babbacombe* (V). Solar halo.

20th.—*Torrington, Stevenstone* (V). Heavy H storm, yielding ·34 in.; much damage to fruit blossoms.

21st.—*Ross, The Graig* (VI). Solar halo.

22nd.—*Stourport, Lincomb Lock* (VI). Stormy from S.W.—*Ballinasloe* (XXII). T.

23rd.—*Diss* (IV). Strong gale from S.E.—*Miltown Malbay* (XX). Heavy gale from N.W.

24th.—*Buntingford, Throcking* (III). TS. with H.—*Rendlesham Hall* (IV). TS.—*Beccles, Ellough* (IV). T.—*Loughborough* (VII). L, T, and H.—*Nottingham, Strelley Hall* (VII). TS.—*Stamford, Ketton Hall* (VII). T, L, and heavy hailstorm.

25th.—*Melrose* (XII). T.

26th.—*Addington* (III). A great flood.

27th.—*Dowra* (XXIII). Stormy from N.W.

28th.—*St. Leonards* (II). Gale from S.W.—*Beccles, Ellough* (IV). T. —*Compton Bassett* (V). T, L, and R.—*Torquay, Babbacombe* (V). S.S.W. gale.—*Wakefield, Stanley* (IX). TS.—*Miltown Malbay* (XX). Heavy gale from N.W. with H and R.

28th—29th.—*Spilsby, Partney* (VII). Gale.

29th.—*Hanworth* (I). Heavy storm of wind.—*Pinner* (I). Gale.— *Abinger* (II). Hurricane of wind, damage to large trees excessive.— *Croydon, Addiscombe* (II). Strong gale, average velocity of wind between 3 p.m. and 9 p.m. 38 miles an hour, foliage much damaged.— *Kew* (II). The raindrops and hailstones were so strongly impregnated with salt, that they destroyed most of the foliage upon which they fell.—*Hythe* (II). A violent S.W. gale, doing much damage.—*Canterbury, Harbledown* (II). Severe gale from S.W., trees blown down and branches broken off, foliage exposed to the gale destroyed.—*Margate, Renfrew Villa* (II). Gale with driving R, doing much damage to fruit and forest trees.—*Bromley Common* (II). Violent gale.—*Littlehampton* (II.) Violent gale, the wind veering from S.E. to S.W. Vegetation of all sorts irrecoverably damaged.—*Chichester, Singleton* (II). Terrific hurricane, trees and chimneys blown down in every direction. My windows eight or nine miles from the sea were so covered with salt spray, that the transparency was obscured.— *Horsham* (II). Gale; believed to be the strongest since 1836.—*St.*

Leonards (II). Strong gale from W., doing much damage in the town. —*St. Lawrence* (II). Heavy westerly gale.—*Southend* (IV). Strong gale S. to W.—*Braintree, Bocking* (IV). Heavy gale at night.—*Rendlesham Hall* (IV). S.W. gale at night.—*Beccles, Ellough* (IV). Heavy S.W. gale.—*Diss* (IV). Heavy gale with tremendous squalls in afternoon and night.—*Alderbury* (V). Great storm, much damage to trees. —*Compton Bassett* (V.) Strong gale from W., trees broken and many uprooted.—*Langton Herring* (V). Great storm from W.S.W.—*St. John's* [*Devonport*] (V). Heavy W.N.W. gale with R, trees blown down.—*Torquay, Babbacombe* (V). Very severe W.S.W. gale, velocity of wind 61 miles between 3 and 4 p.m.—*Ashburton, Druid* (V). Violent storm of wind.—*Melton, Coston* (VII). Gale at night.—*Stamford, Ketton Hall* (VII). Heavy gale at night.—*Liverpool, Walton-on-the-Hill* (VIII). Severe storm from N.E., with R and T.—*Wakefield, Stanley* (IX). Gale at night.—*Llanfrechfa* (XI). E. gale.—*Llandovery* (XI.) Very stormy.—*Builth, Abergwessin* (XI). Very stormy with S and R 1·52 in.—*Nantgwillt* (XI). A very rough day, with S and heavy R 1·54 in.—*Port Madoc* (XI). Storm W.N.W.

30th.—*Croydon, Addiscombe* (II). Duration of sunshine 11·5 hours. *Banbury, Wroxton* (III). T.—*Gloucester, Maisemore Lock* (VI). Heavy T, H and R.—*Cheltenham* (VI). TS with R and H.—*Ross, The Graig* (VI). TS.—*Llanfrechfa* (XI). T, L, and hailstorms.

MAY.

1st.—*Macclesfield Park* (VIII). TS, with H.—*Knutsford* (VIII). TS 2 p.m.—*Wakefield, Stanley* (IX). TS.—*Ayr, Cassillis House* (XIV). T at night.—*Dalnaspidal, H.R.S.* (XVI). T, R, and sleet.

2nd.—*Torquay, Babbacombe* (V). Solar halo.

3rd.—*Abinger* (II). TS.—*Hythe* (II). TS.—*St. Leonards* (II). TS, with heavy H and R.—*Addington* (III). Severe TS with H, some stones as large as marbles; a sheep killed and an elm tree destroyed.—*Northampton* (III). Heavy storm of T, L, and R, doing considerable damage in this and neighbouring counties.—*Diss* (IV). Severe TS distant.—*Stoke Bliss* (VI). Remarkable H storm, with T; ·86 in. fell in less than half-an-hour, doing great damage to crops.—*Cheadle, The Heath House* (VI). Fearful TS, with a perfect deluge of R, more than 1 in. falling in little over 10 minutes, with hailstones of large size ($\frac{3}{4}$ in. diameter), doing a great deal of damage to young foliage and crops.—*Loughborough, Victoria St.* (VII). TS.—*Coston* (VII). T and very vivid L.—*Stamford, Ketton Hall* (VII). TS.—*Partney* (VII).

—*Nottingham, Strelley Hall* (VII). Heavy TS with H.—*Macclesfield Park* (VIII). TS with H.—*Knutsford* (VIII). TS 3 p.m.—*Bolton, Hampden St.* (VIII). Heavy T, L, H and R from 4 to 5.20 p.m.—*Scarborough* (IX). TS.—*Shap* (X). T, R, H, S and sleet.—*Llanfrechfa* (XI). T and L at 2.10 p.m., and violent storm of H and R.—*Llanwrtyd Wells* (XI). T and L.—*Corwen, Rhug* (XI). Heavy TS.

4th.—*Littlehampton* (II). T and vivid L.—*Pewsey* (V). TS, with heavy R, 1·11 in.—*Compton Bassett* (V). T, L and R.

6th.—*Torquay, Babbacombe* (V). solar halo.

7th.—*St. Leonards* (II). Solar halo.—*Northampton* (III). T, L and R.—*Diss* (IV). Heavy TS.—*Lynn, Hillington* (IV). Violent TSS, with heavy H and R; hailstones of unusual size; ·24 in. of R fell in 11 minntes.—*Compton Bassett* (V). L at night.—*Coston* (VII). Very severe TS.—*Nottingham, Strelley Hall* (VII). TS, with heavy H and R. —*Knutsford* (VIII). TS 9 p.m.—*Elterwater, Woodlands* (X). TSS.—*Melrose* (XII). T and R.—*Tipperary* (XX). H showers.

8th.—*Abinger* (II). TS.—*St. Leonards* (II). T.—*Knutsford* (VIII). TS about noon.—*Llanwrtyd Wells* (XI). TS, with H and R.

9th.—*Torquay, Babbacombe* (V). Solar halo.

20th.—*Nenagh, Castle Lough* (XX). From 9.30 a.m. to 1 p.m. a most peculiar haze, with an unusual smell; bright sun and strong easterly breeze during the whole time.

22nd.—*Pinner Hill* (I). TS.—*Addington* (III). Sharp TS.—*Sandy* (III). TS.—*Compton Bassett* (V). T and L.—*Pewsey* (V). T.—*Cirencester, Claremont Place* (VI). Very vivid L, ·15 in. of R fell in 25 minutes.—*Cheltenham* (VI). Heavy TS, with H.—*Ross, The Graig* (VI). TS.—*Diglis Locks* (VI). TS.—*Llandovery* (XI). TS.—*Castle Malgwyn* (XI). TS, with heavy R.—*Llanwrtyd Wells* (XI). TS.—*Abergwessin* (XI). T.—*Castle Lough* (XX). TS.—*Miltown Malbay* (XX). Great TS, with heavy R.—*Kilconnell* (XXII). TS.—*Ballinasloe* (XXII). T, L, and heavy R, 1·16 in.

23rd.—*Oxford, Magdalen Coll.* (III). T and L.—*Alderbury* (V). TS. —*Cheltenham* (VI). TS with H.—*Ross, The Graig* (VI). TS.—*Coston* (VII). Heavy R, with T and L.—*Stamford, Ketton Hall* (VII). TS.—*Nottingham, Strelley Hall* (VII). TS with heavy H; the hailstones were about the size of peas, partly transparent and partly opaque. —*Macclesfield Park* (VIII). TS.—*Knutsford* (VIII). TS 5 p.m.—*Liverpool, Walton-on-the-Hill* (VIII). L and T.—*Castle Malgwyn* (XI). TS with heavy R.—*Llanwrtyd Wells* (XI). TS.—*Miltown Malbay* (XX). Distant T.—*Seaforde* (XXIII). TS.

23rd—25th.—*Chesterfield, St. Thomas* (VII). T, L, and R daily.—*—Elterwater, Woodlands* (X). T with very heavy R on 24th, 2·29 in.

24th.—*Littlehampton* (II). T and L.—*Torquay, Babbacombe* (V). S.S.W. gale.—*Bolton, Hampden St.* (VIII). T, L, H and S 1 a.m—*Corwen, Rhug* (XI). TS and H.

24th to 26th.—*Caistor* (VII). H each day.

25th.—*Melrose* (XII). T and L.—*Cambuslang* (XIV). TS.—*Kilconnell* (XXII). T and H.

26th.—*Liverpool, Walton-on-the-Hill* (VIII). T and L.—*Scarborough* (IX). TSS.

27th.—*Croydon, Addiscombe* (II). Duration of sunshine 14 hours.—*Torquay, Babbacombe* (V). S.S.W. gale.—*Dalnaspidal, H.R.S.* (XVI). T and heavy R.—*Killygarvan* (XXIII). Strong S. by W. gale all day.—*Bushmills* (XXIII). TS.

28th.—*Killygarvan* (XXIII). S.W. gale.

29th.—*Nottingham, Strelley Hall* (VII). Duration of sunshine 13·7 hours, the max. duration during the year.

JUNE.

1st.—*St. John's* [*Devonport*] (V). E.S.E. gale.

3rd.—*Wellington College* (II). Heavy R, ·65 in. fell in 50 minutes.—*Northampton* (III). T, L and R.—*Silsoe* (III). ·77 in. of R fell between 6 and 7 p.m.—*Sandy* (III). TS.—*Coston* (VII). Very severe TS.—*Scarborough* (IX). TS.

4th.—*Loughborough, Victoria St.* (VII). L and T.—*Chesterfield, St. Thomas* (VII). T, L and R.—*Knutsford* (VIII). Heavy TS.—*Liverpool, Walton-on-the-Hill* (VIII). T, L and R.—*Bolton, Hampden St.* (VIII). T, L and heavy R.

6th.—*St. Leonards* (II). Moderate gale from S.—*Chesterfield, St. Thomas* (VII). T, L and R.—*Macclesfield Park* (VIII). T and H.—*Scarborough* (IX). TS.—*Shap* (X). Strong gale all day.—*Forsinard H.R.S.* (XIX). T and heavy R.—*Watten H.R.S.* (XIX). TS.—*Miltown Malbay* (XX). Stiff westerly gale.

7th.—*Scarborough* (IX). TS, with H.—*Altnabreac H.R.S.* (XIX). T and heavy R.

8th.—*Crewkerne, Bincombe House* (V). TS and heavy R, ·06 in. fell in 8 minutes.

9th.—*Muswell Hill* (I). TSS at noon and 6 p.m., very vivid rainbow at 6.30 p.m.—*Pinner Hill* (I). T and L.—*Croydon, Addiscombe* (II). TS.—*Hythe* (II). TSS, with very heavy R and H squalls.—*Brom-*

ley Common (II). TS.—*East Layton* (IX). TS.—*Llanfrechfa* (XI). T and H.

10th.—*Knutsford* (VIII). TS.—*Shap* (X). Strong N.E. gale all day.—*Ramelton, Killygarvan* (XXIII). N. gale.

11th.—*Lochbroom* (XVIII). Very cold, S on hills.—*Miltown Malbay* (XX). Stiff N. gale.

12th.—*Littlehampton* (II). R, H, and T.—*Addington* (III). T, H, and R.—*Diss* (IV). Sharp TS.—*Lynn, Hillington* (IV). Tremendous T and L, at 1·5 p.m. a flash struck a poplar tree, travelled along one of the roots, and from thence ploughed up the ground to a cottage, shattering all the windows.—*Ross, The Graig* (VI). Hailstorm.—*Shap* (X). Thin S on mountains.

14th.—*Wakefield, Stanley* (IX). Strong gale.—*Shap* (X). N.W. gale.—*Melrose* (XII). S.W. gale.—*Ramelton, Killygarvan* (XXIII). Heavy gale from W.

16th.—*Trowbridge, Holt* (V). TS.

17th.—*Scarborough* (IX). Large Solar halo.

18th.—*Diss* (IV.) TS with heavy R and H.—*Ross, The Graig* (VI). Slight TS.—*Llanfrechfa* (XI). T and heavy showers.—*Melrose* (XII). TSS.

23rd.—*St. Leonards* (II). Solar halo.—*Stamford, Ketton Hall* (VII). Heavy hailstorm.—*Keith H.R.S.* (XVII). Heavy T shower, ·46 in. of R fell in 25 minutes.—*Lochbroom* (XVIII). Very fine triple rainbow, and afterwards violent TS, with heavy R.—*Miltown Malbay* (XX). T and L, and hailstones as big as marbles.—*Ballinasloe* (XXIII). T and heavy showers.

24th.—*Chesterfield, St. Thomas* (VII). T, L and R.—*Macclesfield Park* (VIII). T and H.—*Shap* (X). Great TS.—*Elterwater* (X). T, L and heavy R.—*Corwen, Rhug* (XI). TS and heavy R.—*Melrose* (XII). T, and very vivid L.—*Miltown Malbay* (XX). T and L.

24th and 25th.—*Trowbridge, Holt* (V). TSS.

25th.—*Diss* (IV). TS.—*Liverpool, Walton-on-the-Hill* (VIII). T, L, and R.

26th.—*Pinner Hill* (I). TS.—*St. Lawrence* (II). Solar halo.—*Stonor Park* (III). Remarkably heavy hailstorm; stones very large.—*Cirencester, Claremont Place* (VI). TS; ·16 in. of R fell in 30 minutes.—*Cheltenham* (VI). Heavy TS.—*Stamford, Ketton Hall* (VII). T and L.—*Llandovery* (XI). Tremendous TS.—*Melrose* (XII). T, L, H and R.

29th.—*Dalzell House* (XII). The heaviest R of the season, 1·11 in fell in half-an-hour.

30th.—*Cheadle, The Heath House* (VI). Heavy T and L.—*Bridgnorth Loughton* (VI). 1·30 in of R fell in 2½ hours.

JULY.

1st.—*Compton Bassett* (V). T, L and R.—*Knutsford* (VIII). TS.—*Manchester, Stretford* (VIII). 1·01 in. of R fell in ¾ of an hour during a TS.—*Shap* (X). TS.—*Elterwater* (X). Heavy TS.—*Llanfrechfa* (XI). T and L, with sharp shower.—*N. Esk Res., Penicuick* (XIII). T and L.

1st and 2nd.—*Trowbridge, Holt* (V). TSS.

2nd.—*Bromfield Vicarage* (VI). 1·07 in. of R fell in less than 1 hour.

3rd.—*Elterwater* (X). Violent storms of wind and R.

5th.—*Rendlesham* (IV). TS.—*Macclesfield Park* (VIII). TS with H and R; ·42 in. in 15 minutes.—*Keith, H.R.S.* (XVII). Heavy TS and 1·32 in. of R; ·40 in. fell in 15 minutes at noon.—*Miltown Malbay* (XX). N. gale.

6th.—*Littlehampton* (II). Very squally, much damage.—*Torquay, Babbacombe* (V). S.W. gale.—*Bolton, Hampden St.* (VIII). T, L and heavy R.—*Carlisle, St. James' Rd.* (X). Between 6.15 p.m. and 6.35 p.m. ·40 in. of R fell; the rainstorm, however, was very local, for at a distance of half a mile, no R fell and haymaking was carried on without interruption.—*Solva* (XI). ·67 in. of R fell in 15 minutes.—*Wick, H.R.S.* (XIX). Heavy R, 1·73 in., the greater part of which fell in one hour.

7th.—*St. Leonards* (II). Moderate S.W. gale.—*Addington* (III). Stormy with T and H.—*Diss* (IV). TS.—*Belfast, New Barnsley* (XXIII). Severe storm of T, R and H, 1·09 in.

7th and 8th.—*Knutsford* (VIII). TSS.

8th.—*Bolton, Hampden St.* (VIII). Occasional distant T during the morning; heavy TS and R from 12.25 to 1 p.m.; occasional T during the afternoon; distant TS about 4 p.m.—*Ballinasloe* (XXII). L, T and heavy showers.—*Dowra* (XXIII). TS.

9th.—*Loughborough, Victoria St.* (VII). TS with H.

10th.—*Compton Bassett* (V). T and L.—*St. Andrews, Newton Bank* (XVI). T ·15 in. of R in 10 minutes.

11th.—*Diss* (IV.) Continuous heavy R from 9 a.m. to 2.45 p.m., 1·39 in.—*Newnham-on-Severn* (VI). R nearly all day, total 2·11 in.—*Cirencester, Claremont Place* (VI). TS lasting 2½ hours; 2·10 in. of R fell.—*Stamford, Ketton Hall* (VII). T and R nearly all day, 1·64 in.—

Elterwater (X). T and L most of the day.—*Ayr, Cassillis House* (XIV). TS.—*Dollar* (XVI). T and L.

11th and 12th.—*Melrose* (XII). TSS.

12th.—*Addington* (III). T and heavy R, ·92 in., causing large floods, which carried away much hay.—*Coston* (VII). Solar halo; T.—*Macclesfield Park* (VIII). Solar halo.—*Wakefield, Stanley* (IX). T, H and R.—*N. Esk Res.* [*Penicuick*] (XIII). T and L.

13th.—*St. Leonards* (II). Solar halo.

14th.—*Torquay, Babbacombe* (V). S.S.W. gale.

14th and 15th.—*Wythburn* (X). Two days of incessant downpour, total R 3·66 in.—*Melrose* (XII). TSS.

15th.—*Macclesfield Park* (VIII). ·33 in. of R fell in 40 minutes.

16th.—*Trowbridge, Holt* (V). TS.—*Manchester, Newton Heath* (VIII). T, L and heavy R; 2·00 in. fell in 6 hours.

17th.—*Castle Lough* (XX). A TS came from S., and wheeling to W., passed completely round this place by N. and E. to S. again, where it ceased, making the circuit in about 35 minutes, during which time ·50 in. of R fell.—*Dowra* (XXIII). TS.

17th and 18th.—*Ballinasloe* (XXII). L, T and heavy showers.

18th.—*Dollar* (XVI). T and L.—*Castle Lough* (XX). T and H.—*Miltown Malbay* (XX). Strong S.W. gale.—*Dowra* (XXIII). TS with H.—*Killygarvan* (XXIII). TS and 0·50 in. of R in 30 minutes.

20th.—*Miltown Malbay* (XX). Heavy S.W. gale.

22nd to 24th.—*Melrose* (XII). TSS.

23rd.—*Littlehampton* (II). Gale at night.—*Knutsford* (VIII). TS.—*Lochbroom* (XVIII). T, L and heavy showers.

24th.—*Pinner Hill* (I). Hailstorm.—*Lynn, Hillington* (IV). Much T and L.—*Trowbridge, Holt* (V). TS.—*Cheltenham* (VI). TS.—*Knutsford* (VIII). T, H and heavy R.—*St. Andrews, Newton Bank* (XVI). Heavy T.—*Midmar, Blackstock* (XVII). In 15 minutes ·22 in. of R fell.

25th.—*Pinner Hill* (I). TS.—*Lynn, Hillington* (IV). Heavy R, ·80 in. fell in 20 minutes.—*Compton Bassett* (V). T, L and R.—*Macclesfield Park* (VIII). TS.—*Northwich, Highfield* (VIII). Extraordinarily heavy R with T; 1·19 in. fell in 2 hours.—*Knutsford* (VIII). TS.—*Llanfrechfa* (XI). T and L.—*Cardiff, Park Place* (XI). TS, with heavy R.

30th.—*Littlehampton* (II). Very thick fog.—*Torquay, Babbacombe* (V). L.

31st.—*Nottingham, Strelley Hall* (VII). Min. temp. on grass 37°·9.

AUGUST.

1st.—*Glenaladale* (XVIII). Heavy gale and 1·41 in. of R.—*Newcastle West* (XX). Blowing strongly from N.W.

2nd.—*Shap* (X). Strong N.W. gale all day.—*Watten H.R.S.* (XIX). Heavy gale from from W.

3rd.—*Chesterfield, St. Thomas* (VII). Gale.

5th.—*Watten H.R.S.* (XIX). Gale from N.W.

7th.— *Macclesfield Park* (VIII). Solar halo.

9th.—*Cheltenham* (VI). T.

12th.—*Croydon, Addiscombe* (II). Max. temp. of year 79°·4, frequent L in evening.—*Littlehampton* (II). T and L.—*St. Leonards* (II). L and T at sea.—*St. Laurence* (II). Fine L and T in evening.—*Compton Bassett* (V). T and L.—*Langton Herring* (V). TSS.—*Beaminster* (V). TSS.—*Babbacombe* (V). TSS.—*Ashburton, Druid* (V). T, L and R in evening.—*Cheltenham* (VI). L in evening.—*Coston* (VII). T and L.—*Llanfrechfa* (XI). T and L.—*Castle Malgwyn* (XI). TS at night.—*Llanwrtyd Wells* (XI). L at night.—*Fermoy Gas Works* (XX). T and L.—*Miltown Malbay* (XX). Frequent L.—*Kilconnell Rect.* (XXII). TS. *Ballinasloe* (XXII). Violent TS.—*Dowra* (XXIII). TS.—*Killygarvan* (XXIII). TS, with heavy R, ·75 in. of R in 1 hour 15 minutes.

13th.— *Trowbridge, Holt* (V). Severe TS all night, L very vivid and almost incessant.—*Macclesfield Park* (VIII). Heavy TS.—*Knutsford* (VIII). L in evening.—*Bolton, Hampden St.* (VIII). Occasional T during the day, distant TS about 7 p.m. which was very severe at neighbouring places.—*Flookburgh* (VIII). Great TS.—*Scarborough* (IX). TS, in morning.—*Shap* (X). Severe TS.—*Port Madoc* (XI). Heavy TS., ·70 in. of R. fell in 1 hour.—*Melrose* (XII). Distant T.—*N. Esk Res.* [*Penicuick*] (XIII). T and L.—*Dalnaspidal H.R.S.* (XVI). T and R ·90 in.—*Forsinard H.R.S.* (XIX). T and L.—*Cahir* (XX). T and heavy R.—*Castle Lough* (XX). TS in morning.—*Stewartstown, Ardtrea* (XXIII). TS, ·95 in. of R fell in half an hour.

13th and 14th.—*Elterwater* (X). TSS, with heavy R.—*Llandovery* (XI). Heavy TSS.—*Watten H.R.S.* (XIX). Exceptionally severe TSS.

14th.—*Diss* (IV). TS, and heavy showers.—*St. Andrew's, Newton Bank* (XVI). TS, ·16 in. of R fell in 15 minutes.

15th.—*Miltown Malbay* (XX). N.W. gale.

16th.—*St. Leonards* (II). Moderate W. gale.

20th.—*St. Leonards* (II). W.S.W. gale.

21st.—*Glenaladale* (XVIII). Gale.—*Killygarvan* (XXIII). W. gale all day.

22nd.—*Littlehampton* (II). Gale at night.—*Langton Herring* (V). Strong gale at night.—*Babbacombe* (V). S.W. gale.—*Ashburton, Druid* (V). Storm all night.—*Llanfrechfa* (XI). Gale at night.—*Melrose* (XII). Strong S.W. wind.—*Kilconnel* (XXII). Storm from N.W.

22nd and 23rd.—*Miltown Malbay* (XX). N.W. gale.

23rd *Croydon, Addiscombe* (II). Moderate gale.—*Diss* (IV). Half a gale from S.W.—*St. John's* [*Devonport*] (V). S.W. gale—*Babbacombe* (V). W. gale.—*Cheltenham* (VI). Gale.—*Macclesfield Park* (VIII). Hailstorm and heavy R.—*Dowra* (XXIII). Stormy from N.W.

24th.—*Coston* (VII). Severe TS.—*Chesterfield, St. Thomas* (VII). T, L and R.—*Macclesfield Park* (VIII). T, heavy R and floods.

25th.—*Maisemore Lock* (VI). TS.—*Cheltenham* (VI). Very severe TS, with heavy R. ·88 in.—*N. Esk Res.* [*Penicuick*] (XIII). T and L.

27th.—*Elterwater* (X). Fine lunar rainbow.

28th and 29th.—*Langton Herring* (V). Fresh gale.

29th.—*St. Leonards* (II). Moderate W.S.W. gale, with TS.—*St. Lawrence* (II). Gale.—*Babbacombe* (V). W. gale.

31st.—*Buntingford, Throcking* (III). T.

SEPTEMBER.

1st.—*Builth, Abergwessin* (XI). T and heavy R. 1·09 in.—*Newcastle West* (XX). Strong N.W. wind.

2nd.—*Littlehampton* (II). S.W. gale.—*Babbacombe* (V). W.S.W. gale.—*Whorlton* (X). S.W. gale.—*Shap* (X). Strong gale.

3rd.—*Loughborough* (VII). L and T.—*Nottingham, Strelley Hall* (VII). TS and heavy R.

12th.—*Ashburton, Druid* (V). L and H.—*Cheltenham* (VI). TS.—*Llanfrechfa* (XI). H and T.—*Cardiff, Park Place* (XI). TS.—*Castle Malgwyn* (XI). TS.

12th and 13th.—*Banbury, Wroxton* (III). L.—*Torquay, Babbacombe* (V). L.—*Ross, The Graig* (VI). L.

13th.—*Llanfrechfa* (XI). Heavy T and L.—*Dungiven* (XXIII). 1·23 in. of R fell, causing the most destructive floods known for 40 years.

13th and 14th.—*Littlehampton* (II). T and L.—*St. Leonards* (II). T and L.—*Buntingford, Throcking* (III). L and T.—*Trowbridge, Holt* (V). TSS.

13th, 14th and 15th.—*St. Lawrence* (II). L and T.

14th.—*Muswell Hill* (I). L and T.—*Pinner Hill* (I). T and H.—*Abinger* (II). TS.—*Croydon, Addiscombe* (II). TS, 0·42 to 1·15 p.m.—*Torquay, Babbacombe* (V). L and T.—*Compton Bassett* (V). T and L.—*Ross, The Graig* (VI). L.

15th.—*Croydon, Addiscombe* (II). Sharp frost on grass, 28°·0.

17th.—*Torquay, Babbacombe* (V). Solar halo.

19th.—*Northampton* (III). Heavy local storm of R, 1·48 in.

20th.—*Buntingford, Throcking* (III). ·18 in. of R fell in 20 minutes.

25th.—*Whorlton* (X). ·20 in. of R fell in 15 minutes.

26th.—*Nottingham, Strelley Hall* (VII). Very heavy shower, ·04 in. of R fell in 3 minutes.—*St. Andrews, Newton Bank* (XVI). ·23 in. of R fell in 15 minutes.—*Londonderry, Knockan* (XXIII). Heavy R, 1·83 in., and great flood.

27th.—*Melton, Coston* (VII). T, L, and heavy R.—*Nottingham, Strelley Hall* (VII.) T 3.30 to 6 p.m.—*Chesterfield, St. Thomas* (VII). T, L, and R.—*Esholt* (IX). TS.—*Melrose* (XII). T and L.

28th.—*Torquay, Babbacombe* (V). Solar halo.

29th.—*St. Leonards* (II). Moderate W.S.W. gale.—*Miltown Malbay* (XX). Stiff southerly gale.

OCTOBER.

1st.—*Littlehampton* (II). L in evening.—*Ashburton, Druid* (V). Gale in evening.—*Macclesfield Park* (VIII). Gale.—*Whorlton* (X). Gale from S.W.—*Melrose* (XII). S.W. gale in evening.—*North Esk Res.* (XIII). Gale, with heavy squalls.—*Dollar* (XVI.) Very windy and wet.—*Dalnaspidal, H.R.S.* (XVI). Gale.—*Lochbroom* (XVIII). Fearful gale.—*Glenaladale* (XVIII). Violent gale from S.—*Forsinard H.R.S.* (XIX).—Strong gale.—*Watten, H.R.S.* (XIX). S.E. gale.—*Cahir* (XX). Terrible gale.—*Castle Lough* (XX). Great storm, the greatest remembered; much damage to stacks of hay and corn, and quantities of timber blown down.—*Newcastle West* (XX). Great storm, veering from S. to N.W.; trees uprooted, roofs blown off, and cornstacks overturned and swept away.—*Miltown Malbay* (XX). The most furious hurricane since 1839; it commenced from S. about 8 a.m., gradually increasing in force and being most violent between 1 and 3 p.m.; wind S.W.; from 4 to 6 p.m. it gradually abated. Hay and corn stacks blown over, and thousands of tons lost; thatched and slated houses unroofed, and hundreds of trees uprooted.—*Kilconnell*

(XXII). A most violent storm from S.W.—*Dowra* (XXIII). Hurricane from S.W. to W.—*Dungiven* (XXIII). Hurricane from S.W., veering to N.W., and culminating about 4.30 p.m., doing incalculable damage to the oat crop, much of which was uncut, and to trees and houses.—*Knockan* (XXIII). Great storm of wind, doing much damage to trees, crops, &c.—*Killygarvan* (XXIII). Violent hurricane S. by E. to S.S.W., unaccompanied by R; enormous damage to houses, trees, and crops, some farmers having lost more than half their crops.—*Buncrana* (XXIII). Violent gale from S.W., trees blown down, houses stripped of slates or thatch, and crops much damaged.

2nd.—*Croydon, Addiscombe* (II). Brilliant aurora.—*St. Leonards* (II). Very bright aurora.—*St. Lawrence* (II). Splendid aurora.—*Addington* (III). Aurora.—*Rendlesham* (IV). Aurora. *Lynn, Hillington* (IV). Magnificent aurora.—*Trowbridge, Holt* (V). Great display of aurora.—*Compton Bassett* (V). Splendid aurora.—*Babbacombe* (V). Aurora.—*Loughborough, Victoria Street* (VIII). Fine display of aurora. *Macclesfield Park* (VIII). Aurora, unusually fine.—*Scarborough* (IX). Aurora.—*Shap* (X). Strong gale all day; aurora at night.—*Carlisle, St. James's Road* (X). Much L at night.—*Melrose, Abbey Gate* (XII). L in evening.

3rd.—*Littlehampton* (II). Remarkable aurora; arch of detached patches of white from E. to W., and splendid flashes of crimson.—*Nottingham, Strelley Hall* (VII). Very fine aurora.

7th.—*Littlehampton* (II). T, L, R, and H at night.—*St. Leonards* (II). TS in evening.—*Rendlesham* (IV). TS.

8th.—*St. Lawrence* (II). L, T, R and H in early morn.—*Addington* (III). T and L.—*Lynn, Hillington* (IV). Much T and L.—*Langton Herring* (V). T and L.—*Torquay, Babbacombe* (V). TSS.—*Ashburton, Druid* (V). TS.

8th and 9th.—*Trowbridge, Holt* (V). TSS.

12th.—*Canterbury, Harbledown* (II). Much L from 6 to 9 p.m.

15th.—*Compton Bassett* (V). Stormy with heavy R, 1·10 in.—*Paignton, Hollacombe* (V). Of the fall of 2·25 in. entered to this day, the greater part fell between 8 and 9 a.m. on 16th.

15th and 16th.—*Worthing* (II). During about 12 hours in the night of 15th-16th 2·11 in. of R fell, and ·91 more in the succeeding 24 hours.—*Arundel, Dale Park* (II). 2·97 in. of R fell in the two days.—*Closewood* (II). 2·25 in. of R fell in 24 hours.

16th.—*Crewkerne, Bincombe House* (V). Tremendous R, 1 in. fell between 9 and 11 a.m., and 2·69 in. in 10 hours.

18th.—*Loch Shiel, Glenaladale* (XVIII). Blowing hard from S.S.E. at night.—*Cahir* (XX). Awful R, 2·01 in., and gale at night.—*Newcastle West* (XX). Gale.—*Kilconnell* (XXII). Storm from S.E. with heavy R, 1·28 in.—*Dowra* (XXIII). Continuous R and floods.—*Killygarvan* (XXIII). S.E. gale at night.

19th.—*Watten, H.R.S.* (XIX). Storm of E.S.E. wind and R.

20th.—*Llandovery* (XI). Heavy T and sheet L.—*Castle Malgwyn* (XI). T and heavy R, 1·24 in.

21st.—*St. Leonards* (II). Gale from S.—*Rendlesham Hall* (IV). Strong S.E. gale.

22nd.—*Felthorpe* (IV). Severe S.W. gale.

22nd and 23rd.—*Clifton* (VI). Heavy R, 3·03 in. in the two days, causing, in the low lying districts of Bristol, the greatest floods remembered.

23rd.—*Rendlesham* (IV). Much L in evening.—*Alderbury* (V), Great storm and heavy R, 1·22 in.—*Pewsey* (V). T and heavy R. 1·10 in.—*Ashburton, Druid* (V). S, H and heavy R, 1·06 in.—*Elterwater, Woodlands* (X). Strong wind and T, L, H and R.

23rd and 24th.—*Ross, The Graig* (VI). Heavy R and S on the latter day, 2·18 in. in the two days.—*Coventry, Coundon* (VI). R and S, 1·55 in. fell in 12 hours.—*Bishop's Cannings* (V). 1·98 in. of R fell in 24 hours from noon to noon.

24th.—*Pinner Hill* (I). W. gale, with T and H.—*Abinger Hall* (II). Severe storm of wind and R.—*Croydon, Addiscombe* (II). High wind and max. velocity 68 miles per hour, but this rate was maintained for only a few seconds. From noon to 3 p.m. the barometer rose at the average rate of 0·14 in. per hour.—*Hythe* (II). Terrific S.E. to S.W. gale with heavy R.—*Margate, Renfrew Villa* (II). Strong gale—*Littlehampton* (II). Heavy gale and R.—*St. Leonards* (II). Severe gale from S. —*St. Lawrence* (II). Gale.—*Ventnor* (II). Storm from S.S.E. to W., with T, L and H.—*Addington* (III). Violent gale of wind, with R and S, and followed by floods, many large trees blown down.—*Stonor Park* (III). Gale with S.—*Oxford, Mag. Coll.* (III). Violent wind and heavy fall of S.—*Banbury, Wroxton* (III). Gale of wind with heavy S and R, 1·07 in., followed by great floods.—*Daventry, Fawsley* (III). 1·89 in. of R fell in 12 hours.—*Ipswich, Bishop's Hill* (IV). Very heavy S.W. gale. —*Rendlesham* (IV). S.E. gale.—*Beccles, Ellough* (IV). Short but severe S.W. gale, with S and R, ·90 in.—*Diss* (IV). Tremendous gale, with heavy S, sleet and R, 1·00 in.; many trees blown down, and much damage done to buildings.—*Lynn, Hillington* (IV). Tremendous gale.

—*Trowbridge, Holt* (V). Gale and TS, with H, S, sleet and R.—*Compton Bassett* (V). T and L, with heavy R and S.—*Langton Herring* (V). Heavy TS early, R 1·82 in., in less than 7 hours.—*Westbourne* [*Bournemouth*] (V). A cold wave passed over about 11 a.m.; the temp. fell from 52°·5 to 36°·2, and by 2 p.m. had recovered to 52°·0; wind S.W. to W., then N.W., strong and gusty; the bar. rose rapidly during the day.—*Beaminster* (V). TS in early morn. 1·95 in. of R fell between 4 a.m. and 9 a.m.; whole town flooded.—*Crewkerne, Bincombe House* (V). T, L, S and heavy R; 1·56 in. fell between 5 and 8 a.m.—*Gloucester, Llanthony Lock* (VI). Heavy fall of S.—*Cheltenham* (VI). Terrible TS, with R, S, and much wind. R began at 3 a.m., changed to S at 10 a.m., followed by R again till 3 p.m.; 2·09 in. of R and S fell in 24 hours, followed by disastrous floods, which rendered roads impassable, and inundated many houses in the lower parts of Cheltenham.—*Ledbury, Putley Court* (VI). Between daylight and dark 2·01 in. fell; ·63 in. of R and 1·38 in. of S.—*Coston* (VII). Very heavy R and S, 1.30 in. flooding several cottages.—*Stamford, Ketton Hall* (VII). Very rough with R and S; temp. fell to 32° at 2 p.m.—*Spalding, Pode Hole* (VII). Heavy R, 1·75 in., causing great floods, which made a terrible breach in the bank of the river Glen.—*Navenby* (VII). 1·64 in. of R fell, the largest amount recorded in one day since September 30th, 1871.—*Nottingham, Strelley Hall* (VII). Heavy S and R, 1·10 in.; temp. fell from 39°·6 at 9 a.m. to 32°·8 at 1 p.m.—*Chesterfield, St. Thomas* (VII). Great gale.—*Beverley, Tickton* (IX). 1·56 in. of R fell in 6 hours from 11 a.m. to 5 p.m.—*Llanfrechfa* (XI). Snow storm.

24th and 25th.—*Hereford, Burghill* (VI). Heavy R, causing the greatest local flood since September 7th, 1878.

25th.—*Bath, Queen's Parade* (V). The highest flood for more than 40 years.—*Cheltenham* (VI). Pond frozen.

26th.—*Melrose* (XII). L in evening.—*North Esk Res.* [*Penicuick*] (XIII). Ice on ponds.—*St. Andrew's, Newton Bank* (XVI). Much L in evening.—*Seaforde* (XXIII). Heavy T, L and R at night.

27th.—*Torquay, Babbacombe* (V). E.N.E. gale.—*Scarborough* (IX). TS.

27th and 28th.—*Sheldwich* (II). Extraordinary R, 2·82 in. in the two days.—*Rendlesham* (IV). Heavy R, 2·11 in. in the two days.—*Diss* (IV). Blowing heavily with continuous R, 1·71 in. in the two days, followed by disastrous floods.

28th.—*Littlehampton* (II). Gale.—*Addington* (III). Very stormy, great flood.—*Beccles, Ellough* (IV). E. gale with R, 1·10 in.

29th.—*Canterbury, Harbledown* (II). S.W. gale and heavy R, 1·27 in. —*Miltown Malbay* (XX). T, L and heavy R.

30th.—*Elterwater* (X). T, L and showers of R and H.

NOVEMBER.

1st.—*Croydon, Addiscombe* (II). Fresh gale.—*Diss* (IV). Gale from S.E.—*Babbacombe* (V). Heavy S.S.W. gale.—*Cheltenham* (VI). A most tempestuous day.—*Coston* (VII). Gale.—*Stamford, Ketton Hall* (VII). Gale.—*Macclesfield Park* (VIII). Gale.—*Llandovery* (XI). Gale.—*Cahir* (XX). Gale.—*Newcastle West* (XX). N.W. gale and heavy R.

2nd.—*Miltown Malbay* (XX) T, L and heavy H.

2nd—5th.—*Babbacombe* (V). S.W. gales.

3rd.—*Pinner Hill* (I). W.S.W. gale.—*Diss* (IV). Heavy gale from S.W.—*Stourport, Lincomb Lock* (VI). S.W. gale.—*Coston* (VII). Gale with heavy R.—*Whorlton* (X). Gale from W.—*Shap* (X). Strong gale and heavy R.—*Llanfrechfa* (XI). Gale.—*Melrose* (XII). N.E. gale.—*Cahir* (XX). Gale.—*Kilconnell* (XXII) Hailstorms with T and L.—*—Dowra* (XXIII). Very stormy from W.

3rd and 4th.—*Loch Shiel, Glenaladale* (XVIII). Very stormy from W.S.W. with heavy R.

3rd—5th.—*St. Leonards* (II). S.W. gales.—*Newcastle West* (XX). Vivid L nightly.

4th.—*Northampton* (III). Gale in night.—*Diss* (IV). Gale from S.W.—*Nottingham, Strelley Hall* (VII). Heavy H with L and T.—*Scarborough* (IX). Severe TS.—*Melrose* (XII). S.W. gale.—*St. Andrews, Newton Bank* (XVI). S.W. gale.—*Ramelton, Killygarvan* (XXIII). W. gale all day.

4th and 5th.—*East Layton* (X). Heavy gales.

5th.—*Shap* (X). Storm of wind and R and great flood.—*Watten, H.R.S.* (XIX). W. gale at night.

6th—8th.—*Cardiff, Park Place* (XI). T and L.

7th.—*Addington* (III). Great flood.—*Northampton* (III). Heavy floods.—*Diglis Locks* (VI). Heavy S.W. gale.—*Watten, H.R.S.* (XIX). Storm at night from S.E.—*Newcastle West* (XX). Storm at night from W.—*Miltown Malbay* (XX). Stormy with T and L.

7th—9th.—*Babbacombe* (V). S.W. gales.—*Ashburton, Druid* (V). L and H.—*Elterwater* (X). T, L, H and heavy R.

8th.—*Cheltenham* (VI). TS at night.—*Diglis Locks* (VI). Heavy TS.—

Loughborough, Victoria St. (VII). TS at midnight.—*Coston* (VII). Severe storm from W; T and L very frequent.—*Stamford, Ketton Hall* (VII). L, T and H.—*Nottingham, Strelley Hall* (VII). T at 3.20 p.m. Heavy TSS and H, 11 to 11.30 p.m.—*Liverpool, Walton-on-the-Hill* (VIII). L, H and R.—*Cartmel, Pit Farm* (VIII). Heavy H, breaking nearly all the windows on the W. side of the labourers' houses.—*Carlisle, St. James' Rd.* (X). T, heavy R and H, S.W. gale.—*Llechryd, Castle Malgwyn* (XI). Stormy with T and L.—*Menaifron* (XI). T and H.

9th.—*Shap* (X). Strong gale all day.—*Llanfrechfa* (XI). Gale.—*Miltown Malbay* (XX). N.W. storm.—*Ramelton, Killygarvan* (XXIII). T, L and H.

10th.—*Addiscombe* (II). Duration of sunshine 6·5 hours.

11th.—*Nottingham, Strelley Hall* (VII). Duration of sunshine 6·7 hours.

12th.—*Littlehampton* (II). Gale at night.—*Newcastle West* (XX). Ice $\frac{1}{4}$ inch thick.

12th and 13th.—*Babbacombe* (V). E. gales.

13th.—*Newcastle West* (XX). Brilliant aurora.—*Miltown Malbay* (XX). Ice $\frac{1}{2}$ in. thick.

14th.—*Braintree, Bocking* (IV). Heavy gale.—*Rendlesham Hall* (IV). E. gale.

15th.—*Muswell Hill* (I). Heavy fall of S.—*Addington* (III). Great fall of S, trees much broken by the weight.—*Ross, The Graig* (VI). S 3 to 4 in. deep.

15th and 16th.—*Uxbridge, Harefield Park* (I). Heavy fall of S.

16th.—*Buntingford, Throcking* (III). S 4 in. deep.—*Banbury, Wroxton* (III). S 5 in. deep.—*Babbacombe* (V). TS.—*Cheltenham* (VI). S and sleet all the morning.—*St. Andrews, Newton Bank* (XVI). S.E. gale.

17th.—*Littlehampton* (II). Very brilliant aurora, deep pink for half-an-hour, afterwards greenish yellow.—*Rendlesham* (IV). Very beautiful aurora, bright rose colour; at 6.5 p.m. a bright light, resembling the tail of a comet, passed across the sky from E. to W.—*Crewkerne, Bincombe House* (V). Fine aurora from 5 to 7 p.m.—*Ross, The Graig* (VI). Brilliant rose-coloured aurora.—*Macclesfield Park* (VIII). Brilliant rose-coloured aurora.—*Wrexham, Brymbo* (XI). The finest aurora seen for many years.—The aurora was also reported, but without details from *Reigate Ringley Mead, Addiscombe, Margate Renfrew Villa, Tenterden, St. Leonards,* and *St. Lawrence* in Div. II.; from *Buntingford Throcking, Addington, Banbury Wroxton* and *North-*

ampton, in Div. III. ; from *Diss* and *Lynn Hillington*, in Div. IV. ; from *Alderbury*, *Trowbridge Holt*, *Langton Herring*, *Babbacombe*, *Ashburton Druid*, in Div. V. ; from *Loughborough* (*Victoria Street*), *Coston*, and *Stamford Ketton Hall*, in Div. VII ; from *Liverpool Walton-on-the Hill* in Div. VIII. ; *Skipton Arncliffe* and *Scarborough* in IX. ; *Melrose*, XII., and *St. Andrews Newton Bank*, XVII.

[For details of the remarkable auroral phenomena of this day, see the article in the *Philosophical Magazine*, by J. Rand Capron, F.R.A.S., F.M.S., "On the auroral beam of November 17th."]

17th and 18th.—*Hythe* (II). Brilliant aurora.

18th.—*Cawdor* [*Nairn*] (XVIII). Gale.—*Watten, H.R.S.* (XIX). S.S.E. gale at night.—*Ramelton, Killygarvan* (XXIII). Squall with T and L.

18th and 19th.—*Diss* (IV). Gale from W.

19th.—*Cheltenham* (VI). Heavy hailstorm, hailstones large, pyramidal, and granular.—*Liverpool, Walton-on-the-Hill* (VIII). T, L, H and R.—*Miltown Malbay* (XX). N.W. gale at night, with T, L, H and very brilliant aurora.

21st.—*St. Leonards* (II). Solar and lunar halos.—*Langton Herring* (V). Solar halo.—*Newcastle West* (XX). N.W. gale.

22nd.—*Builth, Abergwessin* (XI). Gale.

23rd.—*Miltown Malbay* (XX). Heavy N.W. gale.

24th.—*Cambuslang* (XIV). TS.—*St. Andrews, Newton Bank* (XVI). W. gale.

26th.—*Llanfrechfa* (XI). Gale.

27th.—*Nottingham, Strelley Hall* (VII). Severe squalls of S and R. *Liverpool, Walton-on-the-Hill* (VIII). T, L, H and R.

28th.—*Newcastle West* (XX). Strong gale at night.

DECEMBER.

1st.—*Nottingham, Strelley Hall* (VII). Thick fog all day.—*Islay, Eallabus* (XV). Black rain.

2nd.—*Diss* (IV). Gale from N.W.—*Port Madoc* (XI). S.W. storm.—*Dumfries, Crichton Inst.* (XII). S.E. gale, with heavy R and S.

3rd.—*Miltown Malbay* (XX). S.W. storm.

3rd to 5th.—*Belfast, New Barnsley* (XXIII). S and sleet.

4th.—*Watten H.R.S.* (XIX). Storm of wind and R from E.

4th to 7th.—*North Esk Res.* [*Penicuick*] (XIII). S began to fall at noon on 4th, and continued with little intermission till the evening

of the 7th ; the wind blew strongly from N.E., drifting the S into immense wreaths ; the fall was about 35 inches.

4th to 8th.—*Hawick, Kirkton* (XII). S began to fall on 4th, and by the 8th it was 30 inches deep.

4th to 9th.—*Darlington, Cleveland Parade* (X). Heavy S ; drifts in some places very deep.

5th.—*Chesterfield, St. Thomas* (VII). Gale.—*Shap* (X). N.E. gale and snowstorm.

5th to 9th.—*Aysgarth Vic.* (IX). The worst snowstorm ever known in this district. On the 6th, the wind was N., with a force of from 8 to 10 of Beaufort's scale, and the temp. did not exceed 29°·6 ; the S consequently drifted very much, and on the 7th all roads and the railway were blocked. The Settle and Carlisle Railway was also blocked, and it was not till Saturday evening that we had communication with Hawes Junction. The drifts on the Settle and Carlisle Railway were said to be a mile long, and 15 to 30 feet deep ; even here drifts were only limited by the depth of the hollow to be filled, and the road from Aysgarth to Thornton Rust, 2 miles distant, took just a week to cut ; the men working all Sunday ; many people had narrow escapes, but no lives were lost.

5th to 9th.—*St. Andrews, Newton Bank* (XVI). A heavy fall of S commenced on the 5th, with a N.E. gale, and lasted with varying severity till the 9th, the drifts being very deep. The most severe storm for many years.

6th.—*Nottingham, Strelley Hall* (VII). Heavy S, 6 in. deep.—*Chelford, Astle Hall* (VIII). 8 in. of S on ground.—*Liverpool, Wootton* (VIII). 7 in. of S fell.—*Wakefield, Stanley* (IX). S all day, roads almost impassable ; some children all but lost on the way from school. —*South Milford* (IX). N.E. gale and heavy snowstorm.—*Thixendale* (IX). Furious gale from E. with heavy S.—*Foxholes* (IX). Severe snowstorm with high wind.—*Scarborough* (IX). Heavy gale and 4 in. of S.—*East Layton* (IX). Great snowstorm, said to be the worst for 20 years ; nearly all highways blocked by drifts.—*Wrexham, Brymbo* (XI). Severe snowstorm.—*Port Madoc* (XI). N.E. storm.

6th and 7th.—*Bradford, Farcliffe* (IX). Great snowstorm.

6th, 7th, and 8th.—*Sheffield, Ranmoor* (IX). The greatest snowstorm for many years began on December 6th, accompanied by an easterly gale. The S was very dry, and drifted to a great depth. The storm continued on the 7th and 8th, the depth by that time where not drifted being about 20 in., and on the moors, to the west of Ran-

moor, there were drifts 15 to 20 ft. deep, the roads into Derbyshire being blocked for several days.

6th to 9th.—*Belvoir Castle* (VII). Very heavy fall of S, doing much damage to trees and shrubs and blocking many roads and paths.

7th.—*Dorking, Abinger* (II). 8 in. of S fell.—*Addiscombe* (II). S all day, depth on ground 2½ in.—*Canterbury, Harbledown* (II). S 3 in. deep.—*Babbacombe* (V). N.N.E. gale.—*Melrose* (XII). Great snow-storm ; ·27 in. of S fell between 9 a.m. and 6 p.m., with a N.E. wind.

7th and 8th.—*Bowdon, Erlesdene* (VIII). Gale and heavy S.

8th.—*Banbury, Wroxton* (III). S 5 in. deep.

9th to 12th.—*Tain, Springfield* (XVIII). Very heavy snowfall.

10th.—*Hythe* (II). Heavy fall of S.—*Fermoy, Glenville* (XX). Heavy S.—*Newcastle West* (XX). 5 in. of S.

10th and 11th.—*Cheltenham* (VI). Exceedingly foggy and calm.

11th.—*Addington* (III). Dense fog and intense frost at night.—*Nottingham, Strelley Hall* (VII). Max. temp. 22°·7, min. 16°·9, mean 19°·8. the lowest mean during the year.—*Cahir* (XX). 10 in. of S.

12th.—*Highampton, Winsford* (V). S 10 in. deep.—*Worcester, Diglis Locks* (VI). Heavy fall of S, 4½ in.

13th.—*Torrington, Langtree Wick* (V). Heavy fall of S at night.—*Ross, The Graig* (VI). S 5 to 6 in. deep.—*Nottingham, Strelley Hall* (VII). 3 in. of S, making a total depth on the ground of 10 in.

14th. —*Addiscombe* (II). Dense fog all day.

14th and 15th.—*Diss* (IV). Fog all day.

18th—21st. —*East Budleigh* (V). Remarkable uniformity of temp., total range during the four days 7°.

20th.—*Chesterfield, St. Thomas* (VII). Gale.—*Miltown Malbay* (XX). Squally from N.W. with T and L.

21st.—*Port Madoc* (XI). W. storm.

25th.—*Builth, Abergwessin* (XI). Very stormy with heavy R, 1·79 in

26th.—*St. Leonards* (II). S.W. gale at night.

26th to 30th.—*Babbacombe* (V). W.S.W. gales.

27th.—*Ross, The Graig* (VI). River Wye in flood, 12 ft. above summer level.—*Stanley* (IX). Gale.—*Llanfrechfa* (XI). W. gale with R.—*Newcastle West* (XX). Stormy from N.W.

28th.—*Addington* (II). Very stormy.—*Llandovery* (XI). — Storm and heavy floods.

28th and 29th.—*Melrose* (XII). S.W. gales.

29th.—*Diss* (IV). Gale.—*Chesterfield, St. Thomas* (VII). Gale.

30th.—*Watten, H.R.S.* (XIX). Gale at night.

OBSERVERS' NOTES ON THE MONTHS.

JANUARY.

I. *Muswell Hill.* Rainfall just an inch below the average of ten years, none falling between the 11th and 29th (17 days) a circumstance without parallel during ten years.—*Pinner Hill.* Frost on 10 days; max. temp. 50° on the 5th and 11th; min. 28° on 24th.

II. *Dorking, Abinger Hall.* Rainfall very small, fogs prevalent and a marked absence of sunshine.—*Croydon, Addiscombe.* Mild, calm, and exceedingly dull. It was remarkable for a calm, dull, and foggy, and rainless period lasting about a fortnight (during the whole of which the barometer remained singularly high and steady, and on one day rose to the unprecedented height of 30·976 in.; as regards temperature, it was noteworthy for its similarity to the same month in 1878, and the great contrast it presented to the three previous Januarys.—*Hythe.* Early part showery, the remainder gloomy and fine, with high barometric presure; frost on 10 nights, max. temp. 52° on 6th; min. 28° on 17th.—*Canterbury, Harbledown.* Prevailing wind S.W.; frost on only 11 nights; from 16th to 20th thick fog almost every day; very little sunshine till the 25th.—*Littlehampton.* Dull, dry, and very mild, wild flowers in bloom every where, and ferns flourishing; max. temp. 48° 0 on 28th; min. 26°·0 on 18th and 24th.—*Eastbourne.* Max. temp. 52°·8 on 6th: min. 26°·3 on 25th; frost on 7 days, and on grass on 18 days.—*St. Leonards.* Mean pressure remarkably high; mean temp. about the average; frost on 4 days. No snow. Max. 50°·6 on 6th, min. 28°·7 on 18th.—*Iford.* A fine and mild month, only 10 nights with temp. below 32°·0—*St. Lawrence.* Remarkable lack of sun throughout the month; rainfall 1·94 in. below the average of 14 years. From 7th to end of month the barometer was never below 30 in.; max. temp. 52°·8; min. 28°·5, frost on 3 days.—*Alton, Ashdell.* Frost in air on 12 days, on grass on 16 days; max. temp. 51°, min. 27°.

III. *Buntingford, Throcking Rectory.* Dry, but with much fog, during

which pressure was exceptionally high. Mean temp. 38°·4; max. 50°·4 on 6th; min. 27°·9 on 26th. No snow.—*Winslow, Addington.* Dry and mild, frost on only 11 days; many plants kept flowering all through the month, and the thrush was frequently heard; max. temp. 51°·0 on several days; min. 23°·0 on 25th.—*Oxford, Magdalen College.* Pressure above 30 in. for 24 days consecutively; max. (corrected and reduced) 31·020 in. on 18th. Much ozone during the first half of the month, but scarcely any in the latter half. No snow. —*Banbury, Wroxton.* Max. temp. 52°·0 on 6th; min. 27°·0 on 25th; frost on 7 days.—*Northampton.* Max. temp. 52°·0 on 24th, min. 29°·0 on 24th; frost on 8 days.

IV. *Southend.* Remarkable for high temp. small rainfall and dense fogs. Max. temp. 53°·0 on 6th; min. 30°·0 on 18th; frost on 5 days. —*Harlow, Sheering.* The driest January since 1864; rainfall 1·42 in. below the average of 10 years. Max. temp. 52°·0 on 6th; min. 23°·0 on 25th; frost on 11 days.—*Ipswich, Bishop's Hill.* A dry month, especially the latter half, much fog, very little sun, and only a few slight frosts.—*Woodbridge, Rendlesham Hall.* The bar. was higher than it had been for many years previously, but the weather was foggy, with no sun for several days. Min. temp. 25° on 31st.— *Ellough Rectory.* The month was remarkably calm, gentle airs prevailing on 24 days, and as a consequence fog and haze were frequent. Max. temp. 48° on 6th, min. 26°; frost on 20 days.—*Diss.* Singularly mild, gales prevalent during the first eight days, then remarkably calm, still weather with some fogs and unusually high barometric pressure. Max. 30·900 in. (corrected and reduced) on 18th. Primroses and the other spring flowers in blossom all through the month.— *Hindringham.* Max. 53°·0 on 25th; min. 25°·0 on 31st; frost on 8 days.

V. *Salisbury, Alderbury.* Max. temp. 54°·0 on 4th and 11th; min. 27°·0 on 24th; frost on 13 days.—*Calne, Compton Bassett.* Showery and unsettled up to 9th, thence to the end, very mild and open. Dense fogs on the 16th, 17th, and 18th, and several slight frosts occurred, but no S fell; max. temp. 52°·0 on 28th; min. 27°·0 on the 19th; frost on 8 days.—*Langton Herring.* Nearly all the rain fell in the first ten days, and from 12th to 28th inclusive, only ·02 in. fell; the mean temp. was 2°·4 above the average of 10 years, and as much as 11°·6 above that of January, 1881; thick fogs occurred on 12th and 19th, and other days were foggy. Max. temp. 52°, min. 28° on 24th; frost on 7 days.—*Torquay,*

Babbacombe. Mild, dull, misty, and gloomy, with less than half the average rainfall, but a humid atmosphere. The first week was wet and stormy, with a low barometer; a long dry period of 15 consecutive days occurred from the 11th to the 25th, and was the longest since October, 1877. The barometer was above 30·50 in. from 14th to 26th, and reached 30·98 in. on the 18th; the sky was almost entirely overcast from 10th to 26th (excepting 24th). The temp. in shade exceeded 50° on ten days, the max. being 54°·7 on 27th; min. 27°·2 on 24th, the only day on which frost occurred; it was mild till the 16th, and cold from 18th to 26th. Prevailing winds S.W. to 11th, S.E. from 12th to 16th, and N.E. from 19th to 24th; vegetation unseasonably forward.—*Ashburton, Druid Ho.* Frost on only 3 days; max. temp. 53° on 11th and 27th; min. 29° on the 19th.—*Exeter, Brampford Speke.* Very mild and dry, rainfall less than half the average of 17 years, frost on only 6 days.—*Teignmouth, Woodway.* Mean. pressure 30·318 in.; mean. temp. 44°·4; max. 55°·4 on 27th; min. 29°·7 on 24th; frost on 3 days.—*St. Austell, Cosgarne.* Max. temp. 54°·5 on 27th; min, 27°·0 on 24th; frost on 4 days.

VI. *Clifton, South Parade.* Max. temp. 54°·1 on 28th; min. 27°·8 on 25th; frost on 4 days,—*Newnham-on-Severn.* High temp. throughout the month, max. 53°; min. 27°; very little sun, frost, or high wind; bar. unusually high from 16th to 19th.—*Cheltenham.* Atmospheric pressure very irregular at the commencement of the month, then steadily rising till on 18th it reached 30·984 in. (corrected and reduced); mean pressure 30·344; mean temp. 40°·5; max. 52°·5 on 28th; min. 25°·0 on 25th; frost on 12 days; fogs frequent during the period of high pressure.—*Ross, The Graig.* The bar. was above 30 in. (corrected and reduced) from the 7th to the close of the month, except for 8 hours on the 29th, when it was slightly below; the max. was 30·960 in. on 18th; there was much fog, but also some splendid weather; max. temp. 53°·4 on 6th; min. 28°·0 on 25th; frost on 5 days.—*Wem, Sansaw Hall.* Max. temp. 58°·0 on 11th; min. 28°·0 on 18th; frost on 5 days.—*Cheadle.* Max. temp. 51°·4 on 5th; min. 28°·3 on 18th; frost on 6 days.—*Coventry, Coundon.* Max. temp. 51°·0 on 5th; min. 28°·0 on 24th; frost on 6 days.

VII. *Melton Mowbray, Coston Rectory.* Pressure remarkably high; some very dense fogs, and much cloud; max. temp. 51°·7 on 6th; min. 26°·8 on 25th; frost on 11 days.—*Stamford, Ketton Hall.* Very mild and remarkable for the absence of any severe frosts; max. temp. 54°·0 on 7th; min. 27°·0 on 24th; frost on 8 days.—*Spilsby, Part-*

ney. Pressure and temp. both unusually high; fog, mist, and gloom, prevalent; max. temp. 47° on 5th; min. 23° on 24th; frost on 19 days.—*Horncastle, Bucknall.* Max. temp. 52°·5 on 5th; min. 28°·5 on 25th; frost on 7 days.—*Nottingham, Strelley Hall.* Temperature about 2° above average; the first half of the month being very warm; the latter half rather cold. Rainfall about the average, most of the falls being very slight. Only 7 frosts in the air, and no snow. Mean bar. corrected and reduced 30·313 in.—*Worksop, Hodsock.* A great contrast to January, 1881; the principal features were the absence of any sharp frost (min. only 25°·8), the exceptional height of the bar. (max. 30·918 in. on the 18th), the prevalence of S. and W. winds, and the heavy fall of R and S on the 28th and 29th (1·70 in. between 8 p.m. on the 28th, and 9 a.m. on the 30th). The first part of the month was very mild, the latter part colder; very little R fell before the 28th. Vegetation and farm work much more forward than for the last few years.

VIII. *Macclesfield Park.* Exceptionally mild; mean. temp. 39°·8; max. 51°·0 on 2nd; min. 30°·5 on 27th; frost on only 4 days.—*Liverpool, Walton-on-the-Hill.* Very mild; temp. below freezing point on only 2 days,

IX. *Wakefield, Stanley Vicarage.* Many flowers in bloom at the beginning of the month; max. temp. 52°·0 on 6th; min. 29°·0 on 16th and 24th; frost on only 2 days.—*York, Bootham.* Very foggy, misty, and gloomy at the beginning of the month; max. temp. 51°·0 on 22nd; min. 32°·0 on 21st.—*Sedbergh.* Mean temp. 41°·6; max. 49° on 5th; min. 32° on 4th, the only day on which frost occurred. —*Scarborough.* An exceptionally mild month, making the third in succession characterized by high temp. and small rainfall; other noticeable features are the remarkably high barometric readings, and the total absence of S, forming a striking contrast to the same month last year; mean. temp. 2°·9 above the average; max. 52°·1 on 5th; min. 31°·0 on 27th; mean. sea temp. 42°·7, 2°·0 above last Januaay. —*East Layton Hall,* [*Darlington*]. Exceptionally mild and dry, spring flowers, &c., quite ten weeks earlier than in 1881; thrush heard on several occasions. No S fell except on the 29th, and then it did not lie any length of time. Max. temp 57°·0 on 10th; min. 30°·0 on 27th; frost on 7 days.—*Lune Head, Brough.* Rather showery at the beginning, but afterwards very fine, with but little frost.

X. *Darlington, Whorlton.* Unsettled at the beginning of the month, fine from 11th to 28th inclusive. Max. temp. 46° on 28th;

min. 25° on 11th; frost on 9 days.—*Haltwhistle, Unthank Hall.* Max. temp. 47°·0 on 6th, 12th and 14th; min. 28°·0 on 31st; frost on 8 days.—*Corbridge, Lauder Grange.* Remarkably mild; mean temp. 40°·5, 13°·2 above that of January, 1881.—*Braystones.* Very mild; primroses, &c., in the fields, and wall-flowers plentiful in gardens.—*Elterwater, Woodlands.* Remarkable for the long continued and great height of the bar., the absence of frost, and the large number of calm and foggy days. Max. temp. 52° on 2nd; min. 28° on 18th; frost in air on only one day, and on grass only 7 days.—*Shap, Copy Hill.* Rather wet at the beginning of the month; a few warm, damp, foggy days from 10 to 19th, and fogs frequent towards the end. Very mild in general, S on only one day; land looking fresh and green, spring flowers coming out and birds singing.—*Haweswater, Measandbecks.* Remarkably fine mild weather throughout.

XI. *Llanfrechfa Grange.* Very mild but cloudy, and the latter part very dark and gloomy, with frequent fogs. Max. temp. 53°·0 on 6th; min. 31°·0 on 19th, 21st, 22nd and 25th; frost on 9 days.—*Cardiff, Park Place.* Generally dull and cloudy. Max. temp. 52°·0 on 6th; min. 29° on 22nd.—*Llandovery.* Very mild. Max. temp. 52°·0 on 5th and 12th; min. 30°·0 on 18th.—*Llechryd, Castle Malgwyn.* Extremely mild, with unusually high pressure.—*Builth, Abergwessin Vic.* Max. temp. 51°·0 on 14th; min. 30°·0 on 17th; frost on 4 days.—*Carno, Tybritle.* Max. temp. 47°·0 on 2nd, 5th and 6th; min. 21°·0 on 20th; frost on 11 days.—*Menaifron.* Wet and very mild, with strong breezes; gales on 2nd, 6th and 7th.

XII.—*Dumfries, Crichton Inst.* Mild, with a small rainfall, although the weather generally was cloudy, misty, and moist; high winds were frequent, and several severe gales from W. and S.W. occurred in the first half of the month; mean pressure the highest ever recorded at this station, and mean temp. much above the average; frost on 9 days; max. temp., 51°·7, on 6th; min., 27°·0, on 29th.—*Melrose, Abbey Gate.* Very mild for January; mean temp. 37°·0, 3°·9 above the average; max., 51°·2, on 5th; min., 22°·6, on 29th; frost on 20 days; rainfall ·42 in. below the average; a good many gales, prevailing winds S.W. and W.; all farm work well forward.

XIII.—*North Esk Res.* [*Penicuick*]. Pressure from 6th to 18th the highest registered during 20 years. Max. temp., 48° on 5th; min., 25° on 29th; frost on 10 days.

XIV.—*Glasgow, Queen's Park.* Max. temp., 51°·0 on 5th; min. 28°·0 on 29th; frost on 3 days.

XVI.—*Dollar.* Very mild all the month.

XVIII.—*Lochbroom.* Fine, open, warm, and almost summerlike; no S has fallen even on the neighbouring mountains.—*Loch Shiel, Glenaladale.* First ten days extremely stormy, the 11th a beautiful, calm, sunny day, with a slight touch of frost in the morning; the rest of the month dull, with little wind, and extraordinarily high temp.—*Altnabreac, H.R.S.* Fine weather during the greater part of the month.

XIX.—*Watten, H.R.S.* Very mild, open, and fine, with prevailing W. and S. winds.

XX.—*Tipperary, Henry Street.* A very beautiful month.—*Nenagh, Castle Lough.* The first week was rather wet, but the weather during the middle and latter part of the month was splendid, with brilliant sunshine, and temp. often more like April than January. Pressure continuously high, and remarkably so on the 18th.—*Newcastle West.* Remarkably fine: thrushes singing, bats flying freely in the evening, and gardens full of snowdrops and crocuses; rose-bushes rapidly bursting into leaf, also gooseberries; in short, the weather more like that of April than January.—*Kilrush.* The month commenced wet and wild, but from 9th to 27th it was exceptionally fine and mild; nobody here recollects a finer January.—*Miltown Malbay.* First half of the month rainy, with some high wind; second half beautifully mild and sunny, too mild for the time of year.

XXI.—*St. Mullins* [*Graigue*]. Max. temp. 50° on 5th, 14th, and 19th; min. 32°·0 on 17th.—*Athlone, Twyford.* Max. temp. 54° on 15th; min. 31° on 30th; frost on only 1 day.

XXII.—*Ballinasloe.* Generally fine, most of the R falling at night; temp. high, except on one or two days towards the end; pressure remarkably high. Max. temp. 58°·0 on 5th; min. 28°·0 on 30th; frost on 7 days.

XXIII.—*Seaforde.* Max. temp., 54°, on 18th; min., 30°, on 8th and 18th; frost on 5 days.—*Newtownards.* Unusually fine weather from 16th to 26th inclusive, during which time butterflies appeared and other signs of spring were visible.—*New Barnsley.* Very fine' and open, from 14th to 25th, more like spring than mid-winter; birds singing, and everything showing signs of a too early spring; colder towards the close of the month; prevailing winds S.W., at times strong.—*Bushmills.* Very mild, with exceedingly high bar.; max. temp. 52° on 25th; min. 27° on 28th; frost on 8 days. —*Ramelton, Killygarvan.* Stormy and wet up to 11th, with one vio-

lent gale on 6th; afterwards very fine; some days remarkably mild; rainfall about ·50 in. below average; temp. 1° above it; max. 51° on 14th and 15th; min. 26°·5 on 29th; frost on 9 days.—*Buncrana.* Unusually mild; max. temp. 56° on 16th; min. 31° on 28th; frost on 2 days.

FEBRUARY.

I.—*Muswell Hill.* Rainfall only two-thirds of the ten years' average. No R during the first twelve days. The period of drought from January 12th to February 12th is unprecedented during the last ten years; in this time R was recorded on only one day, January 29th, when ·23 in. fell.—*Pinner Hill.* Max. temp. 54° on 26th; min. 26° on 1st; frost on 7 days.

II.—*Dorking, Abinger Hall.* Very genial month; vegetation earlier than it has been for some years.—*Croydon, Addiscombe.* Mild and very dull, with a calm and very damp atmosphere—a great contrast between the weather of the first ten days and that of the rest of the month; no S.—*Hythe.* Generally mild and fine; max. temp. 55°·5 on 14th; min. 30°·0 on 4th and 15th; frost on three days.—*Bromley Common.* Fine, dry, and mild up to the 24th, but very foggy; frosts generally slight. Max. temp. 59° on 14th, min. 21° on 2nd; frost on 12 days.—*Littlehampton.* Fine open month for farm and garden; vegetation slow through absence of sun; gnats and flies in swarms, as if it were summer. Max. temp. 53° on 24th; min. 28° on 6th, 15th and 20th.—*Eastbourne.* Max. temp. 53°·4 on 26th; min. 28°·7 on 6th; frost in air on two days, on grass on 17 days.—*St. Leonards.* Mild and fine; max. pressure 30·859 in. on 20th; max. temp. 52°·2 on 25th; min. 31°·1 on 5th; frost in air on only one day, on grass on 11 days. —*Iford.* Fine mild month, only 11 nights with temp. below 32°·0.— *St. Lawrence.* A most enjoyable month; vegetation very forward. Max. temp. 54°·1 on 27th; min. 42°·1 on 5th; frost on grass on 12 days.—*Alton, Ashdell.* Max. temp. 54° on 15th, min. 23° on 2nd; frost on 8 days.

III.—*Buntingford, Throcking Rect.* Had it not been for the fall on 14th and 28th, the rainfall would have been exceptionally small; mean temp. 35°·9; max. 53°·4 on 26th; min. 24°·9 on 2nd. S only on 15th.—*Winslow, Addington.* A fine open month; now and then a dense fog, and sometimes very rough winds; bar. very high on 20th, 30·807 in.; vegetation generally very forward. Max. temp.

55° on 14th; min. 23° on 4th; frost in air on 6 days, on grass on 17 days.—*Henley, Stonor Park.* A very mild favourable month.—*Oxford, Magdalen Coll.* Bar. above 30 in. from January 8th to February 10th, inclusive; max. temp. 54° on 14th; min. 25° on 2nd and 4th; frost in air on 6 days, on grass on 15 days.—*Banbury, Wroxton.* Max. temp. 55°; min. 27° on 2nd; frost on 9 days.—*Cambridge, Beech Ho.* Exceedingly mild; mean temp. 39°·8, 0°·7 above the average of 14 years; max. 55° on 26th; min. 25° on 1st; frost on 7 days.

IV.—*Southend.* Max. temp. 55°·6 on 26th; min. 31·0 on 4th; frost on 1 day only.—*Harlow, Sheering Rect.* Rainfall ·47 in. below the average; max. temp. 54° on 26th; min. 23° on 2nd; frost on 11 days.—*Ipswich, Bishops Hill.* A fine dry month, but with little sunshine and much mist and fog.—*Rendlesham Hall.* Very little sun, and light winds during the greater part of the month; max. temp. 52° on 27th; min. 23° on 2nd and 3rd.—*Beccles, Ellough Rectory.* Max. temp. 52° on 26th and 27th; min. 22° on 1st; frost on 15 days. —*Diss.* The month opened with still, fine weather, though it was generally dull till the 9th, then brilliant weather till morning of 14th, when a heavy fall of S occurred, which melted as it fell; this was the only S during the winter. In the third week there was much blustering wind, with bright weather, and the last week was rather rough, with gales from S. and S.W. on 25th and 26th, and a gale with heavy R on 28th. Hardly any frost, and spring flowers abundant, young crops forward and looking well; no prevailing illness.—*Hindringham.* Max. temp. 54° on 25th; min. 26° on 1st; frost on 6 days.

V. *Salisbury, Alderbury.* Max. temp. 63°·0 on 12th; min. 27° on 3rd.—*Calne, Compton Bassett.* The weather generally was very fine and mild; the last few days rather rough and showery; no sharp frosts, and no S. Max. temp. 53° on 14th, min. 28° on 4th; frost in air on 8 days, on grass on 14 days.—*Weymouth, Langton Herring.* A very fine month, with small rainfall; mean pressure high, and mean temp. 2°·3 above the average; max. 56° on 27th, min. 31° on 8th; frost on four days.—*Torquay, Babbacombe.* Very mild, rainfall and number of wet days both about one-third less than the average. Dry, with a very high bar. till the 7th, and from 16th to the 23rd; wet and stormy from 11th to 15th, and after the 24th. The only cold period was from the 4th to the 8th. The max. temp. exceeded 50° on 15 days; mean pressure high, and the range unusually great; prevailing winds S.W. and E.; vegetation unseasonably forward; max. temp. 57°·8 on 22nd, the highest observed in February during

six years; min. 30°·2 on 5th; frost in air on one day only, on grass on 13 days.—*Ashburton, Druid.* Max. temp. 56° on 12th, min. 34° on 5th.—*Teignmouth, Woodway.*—Max. temp. 58° on 27th, min. 32° on 5th; frost on one day only.—*Exeter, Brampford Speke.*—Rainfall less than two-thirds of the average, and only two frosty days.

VI. *Clifton.* Max. temp. 55°·1 on 13th, min. 29°·7 on 4th; frost in air on four days, on grass on 11 days.—*Cheltenham.* The month opened with fine calm weather; no R until the 8th; S, the first in the year, mingled with R on 14th and 15th; very stormy and wet at the close of month; honeysuckle leaves well expanded, and primroses and violets in full bloom at the end of the month. Max. temp. 55°, min. 26°·2 on 5th; frost on seven days.—*Ross, The Graig.* No polar wind the whole month. The last five days of the month the pressure, which had scarcely descended below 30·000 in. since January 7th, gave way, and fell below 29·000 in., and 2·25 in. of R fell in the five days. Max. temp. 54°·9 on 14th, min. 27°·4 on 5th; frost in air on four days, on grass on 13 days.—*Wem, Sansaw.* Max. temp. 55° on 12th, min. 28° on 2nd; frost in air on one day only, on grass on six days.—*Cheadle.* Max. temp. 53°·1 on 13th, min. 26°·8 on 2nd; frost in air on five days, on grass on 20 days.—*Coventry, Coundon.* Max. temp. 53° on 13th, min. 27° on 2nd; frost on six days.

VII. *Melton, Coston Rectory.* Very open and mild; frosts on the first five days and on only two others; prevailing wind W. and S.W. Vegetation very forward. Max. temp. 54°·3 on 13th; min. 24°·3 on 2nd.—*Stamford, Ketton Hall.* Mild and genial, but with frequent misty mornings and few bright days. Max. temp. 55° on 13th and 25th; min. 22° on 1st; frost on 8 days.—*Spilsby, Partney.* Mild with frequent mists. Max. temp. 50° on 26th; min. 23° on 2nd; frost on 12 days.—*Horncastle, Bucknall.* Max. temp. 55°·5 on 13th and 26th; min. 26°·0 on 2nd; frost on 6 days.—*Nottingham, Strelley Hall.* Warm; temp. about 2° above the average. Only five frosts in the shade, and no snow; rainfall about the average; first week foggy; no sunshine recorded during the last six days. Vegetation very forward.—*Worksop, Hodsock Priory.* Warm and dry; mean temp. (42°·5) higher than in any of the 6 previous years; bar. high except on the last few days, during which nearly all the R in the month fell; wind between S. and W. nearly the whole time.

VIII. *Macclesfield, The Park.* Mean temp. 42°·1, 3°·6 above the average of 7 years; rainfall also above the average. Max. temp. 53°·7 on 25th; min. 30°·9 on 3rd; frost on 2 days only.—*Liverpool, Walton-on-the-Hill.* Dry, but stormy and unsettled at the close.

IX. *Wakefield, Stanley Vic.* Very mild and dry, farming operations very forward, and many spring flowers in bloom. Max. temp. 56° on 13th; min. 23° on 1st; frost on 5 days.—*Sedbergh.* Mean temp. 42°·4; max. 56° on 21st; min. 29° on 2nd; frost on 3 days.—*Scarborough.* The exceptionally mild and dry weather experienced since the beginning of November, 1881, continued throughout this month, the mean temp. being 6° higher than that of February, 1881, and 3° above the average of 14 years; in fact the highest since 1869; rainfall ·30 in. below the average. Max. temp. 55°·3 on 22nd; min. 29°·3 on 2nd; frost on 2 days only; mean temp. of sea 42°·3, 2° above average.

X. *Barnard Castle, Whorlton.* Warm and dry until towards the end of the month. Max. temp. 59° on 21st; min. 25° on 2nd; frost on 4 days.—*Haltwhistle, Unthank Hall.* Max. temp. 52° on 11th and 25th; min. 25° on 1st; frost on 6 days.—*Elterwater, Woodlands.* Remarkably mild throughout, primroses in full bloom on 1st. Max. temp. 57° on 21st; min. 21° on 2nd; frost in air on one day, on grass on 8 days.—*Shap, Copy Hill.* The month began with mild weather, heavy fogs in the mornings and bright clear afternoons, but it was wet and stormy at the close.

XI. *Llanfrechfa Grange.* Very mild, with many fogs. Max. temp. 54° on 26th; min. 31° on 2nd; frost on 6 days.—*Llandovery.* Mild and open; max. temp. 55°·0 on 10th; min. 29°·0 on 2nd; frost on 5 days.—*Cardiff, Park Place.* Max. temp. 57° on 21st; min. 30°·5 on 4th; frost on 2 days.—*Llechryd, Castle Malgwyn.* Extremely mild throughout, the temp. scarcely falling to freezing point; last 5 days very wet.—*Builth, Abergwessin Vic.* Very stormy towards the close. Max. temp. 50° on 10th; min. 29° on 1st; frost on 2 days.—*Carno, Tybritle.* Max. temp. 50° on 25th; min. 21° on 2nd; frost on 10 days.—*Menaifron.* A wet month, but with no large fall in 24 hours; winds generally light; gales on 13th and 28th.

XII. *Dumfries, Crichton Inst.* Mild and misty, with high temp. and pressure, and very little sunshine; very little frost; winds generally moderate, except about the middle, when a succession of westerly gales occurred; vegetation far advanced. Max. temp, 52°·6 on 13th; min. 28°·8 on 28th; frost on 5 days.—*Melrose, Abbey Gate.* Unusually mild and open, seldom have farmers been so far forward; mean. temp. (38°·4) 3°·5 above, and rainfall ·56 in. below, the average of 10 years. Max. temp. 53°·8 on 21st; min. 21°·6 on 6th; frost on 15 days.

XIII. *North Esk Reservoir* [*Penicuick*]. Remarkably mild till the evening of 26th, when the wind veered to N.E., followed by lower temp., and snow squalls. Max. temp. 52° on 21st; min. 26° on 16th; frost on 8 days.

XIV. *Ayr, Cassillis House.* Hardly any sunshine; weather mostly dull with S.W. wind.—*Glasgow, Queen's Park.* Max. temp. 58° on 21st; min. 31° on 28th.

XVIII. *Lochbroom.* Very boisterous and rainy, but warm and open, excellent for outdoor work, very little frost, and not a flake of S. From dale to hill-top all is as free of S as in midsummer.—*Tain, Springfield.* Southerly winds prevalent, sometimes very strong.—*Loch Shiel, Glenaladale.* Up to the 12th the weather was extremely mild and very calm, dull and hazy; from 13th to 20th, wet and stormy, followed by a week of mild, but damp weather, and the month ended dry and cold, with strong E. winds.

XIX. *Watten H.R.S.* The first half fine, the latter half stormy, cold, and unsettled.

XX. *Nenagh, Castle Lough.* Very fine and mild; most of the R fell at night; the days being fine and frequently bright. At the end of the month the season was apparently as far advanced as it usually is at the end of March.— *Newcastle West.* Wonderfully fine; larks, thrushes, &c., singing; primroses, violets, and crocuses growing freely by the roadside.—*Kilrush.* Very dry and on the whole fine, but gales and strong winds were frequent.—*Miltown Malbay.* Very mild, but moist; vegetation on good lands very rapid.

XXI. *St. Mullins* [*Graigue*]. Max. temp. 51° on 26th; min. 34° on 7th and 19th.—*Athlone, Twyford.* Max. temp. 55° on 26th; min. 34° on 7th; frost on grass on 14 days.

XXII. *Ballinasloe.* Fine and very mild, with slight R, frequently at night; during the first part the bar. was high, but towards the close it fell below 29 in.; max. temp. 53° on 25th and 26th; min. 32° on 3rd; frost on 1 day only.

XXIII. *Seaforde.* Max. temp. 55° on 26th; min. 30° on 2nd and 3rd; frost on 3 days.—*Belfast, New Barnsley.* A fine open spring month, vegetation making rapid progress, primroses blooming in the open fields; prevalent winds S. and S.W. from 1st to 14th; N.W. and W. to 24th.—*Bushmills.* Remarkably mild; max. temp. 54°·5 on 26th; min. 29° on 7th; frost on 5 days.—*Ramelton, Killygarvan.* Mild, with some high winds, and a large number of rainy days, though the total fall was not much above the average; mean

pressure 30·058 in.; mean temp. 41°·5, 1° above the average; max. temp. 52° on 25th; min. 30° on 3rd and 15th; frost on 5 days.—*Buncrana.* Very mild throughout; max. temp. 58° on 4th; min. 34° on several days.

MARCH.

I. *Muswell Hill.* Rainfall rather below the average of ten years.—*Pinner Hill.* Max. temp. 59° on 9th, min. 29° on 22nd; frost on four days.

II. *Dorking, Abinger Hall.* Very dry, and fewer storms than usual; good in every way for out-door occupations.—*Croydon, Addiscombe.* Exceedingly warm, dry, bright, and windy. It was remarkable for the very small number of even moderately cold days, and for the almost entire absence of north-easterly winds.—*Hythe.* Early part mild and squally; 10th to 20th very fine, and 21st to the end wet and stormy. Max. temp. 62° on 15th and 18th, min. 30° on 22nd; frost on two days.—*Littlehampton.* Unusually dry considering the marked absence of R in the preceding months; vegetation very forward. Max. temp. 63° on 17th and 18th, min. 27° on 4th and 23rd.—*Eastbourne.* Max. temp. 62°·5 on 18th, min. 29°·9 on 23rd; frost in air on two days, on grass on 14 days.—*St. Leonards.* Generally fine and mild till the 21st, when it became cold, with occasional sleet and S. Max. temp, 58°·7, min. 30°·4; frost in air on two days, on grass on 15 days.—*St. Lawrence.* Unusually mild; farmers beginning to cry out for R. Max. temp. 59° on 18th, min. 45°·4 on 3rd; frost in air on two days, on grass on eight days.—*Alton, Ashdell.* Max. temp. 64° on 18th, min. 29° on 22nd; frost in air on four days, on grass on 19 days.

III. *Winslow, Addington.* A month of many weathers; S, R, H, fogs, high winds, and some really beautiful days; vegetation of all kinds forward. Max. temp. 63° on 18th; min. 26° on 23rd; frost on 11 days.—*Henley, Stonor Park.* Very fine, a few frosts, but not severe; everything very forward, fruit trees promising.—*Oxford, Magd. Coll.* Max. temp. 60° on 7th; min. 31° on 14th, 18th, and 22nd; frost in air on 6 days, on grass on 14 days.—*Banbury, Wroxton.* Max. temp. 67° on 18th; min. 27° on 23rd; frost on 7 days.—*Cambridge, Beech House.* Max. temp. 58° on 18th and 20th; min. 29° on 22nd; frost on 6 days.

IV. *Southend.* Max. temp. 63°·1 on 20th; min. 29°·9 on 23rd;

frost on 2 days.—*Harlow, Sheering.* Rainfall 0·13 in. below the average. Max. temp. 59° on 16th, 18th, and 20th; min. 27° on 23rd; frost on 10 days.—*Beccles, Ellough Rectory.* Max. temp. 59° on 30th; min. 25° on 22nd and 23rd; frost on 15 days; S.W. winds prevailed on 20 days.—*Diss.* Perfect weather during the whole month, with exception of 21st, 22nd, and 26th, when there were squally showers of H, with high winds and some S, which for the first time during the winter, remained on the ground, viz., for half-an-hour on 22nd; spring flowers in profusion, the lambing season very favourable, field crops and gardens forward. Colds, bronchial affections, and sore throats, rather numerous.—*Hindringham.* Max. temp. 67° on 18th; min. 30° on 3rd; frost on 3 days.

V. *Salisbury, Alderbury.* Max. temp. 78° on 18th; min. 28°·0 on 22nd; frost on 5 days.—*Calne, Compton Bassett.* Cloudy, showery or foggy during the first 11 days, thence to 20th the days very fine, bright, and sunny, but the nights cold; the last 12 days were showery, with high winds and a strong N.W. gale on the morning of the 26th. Max. temp. 63° on 17th; min. 28° on 4th and 23rd; frost in air on 8 days, on grass on 15 days.—*Weymouth, Langton Herring.* Although R fell on 14 out of the first 28 days, only ·49 in. was measured in that time; from the 12th to the 19th, the weather was most beautiful, the days were warm, bright, and sunny, with an almost total absence of wind. A favourable month for farmers; mean temp. 3°·3 above the average, and the highest for March during 11 years. Max. 58° on 8th and 20th; min. 31° on 4th, 22nd, and 23rd; frost on 3 days.—*Babbacombe.* Very mild with less than half the average rainfall; mean temp. (46°·6) higher, mean daily range (14°·7) greater, and amount of cloud less than any observed in the previous five Marches, the 3rd, 21st, and 22nd were the only cold days; showery till 11th and after 21st, but very fine from 13th to 19th; mean pressure above the average, with a large range; S.W. winds prevalent till 10th and after the 23rd; max. temp. 63°·5 on 18th; min. 32°·2 on 22nd; frost on grass on 20 days.—*Ashburton, Druid.* Max. temp. 65°·0 on 18th; min. 32°· on 22nd.—*Teignmouth, Woodway.* Max. temp. 62°·8 on 20th; min. 30°·5 on 22nd; frost in air on 2 days, on grass on 14 days.—*Exeter, Brampford Speke.* Rainfall less than half the average; 4 frosty nights.

VI. *Clifton, South Parade.* Max. temp. 61°·2 on 18th; min. 30°·2 on 4th; frost in air on 2 days; on grass on 11 days.—*Cheltenham.* A most beautiful month, lovely weather from 4th to 20th; hedges

getting quite green ; temp. 1°·9 above average of 5 years ; max. 62° on 18th ; min. 25° on 23rd ; frost on 11 days.—*Ross, The Graig.* Much very bright weather, but many slight night frosts ; great diurnal range of temp. in the middle of the month ; vegetation 3 weeks early ; max. temp. 63°·8 on 16th ; min. 28°·7 on 23rd ; frost in air on 8 days, on grass 14 days.—*Wem, Sansaw Hall.* Max. temp. 61°·0 on 18th ; min. 30° on 22nd ; frost in air on 6 days, on grass on 19 days. —*Cheadle.* Max. temp. 61°·3 on 18th ; min. 27°·5 on 22nd ; frost in air on 6 days, on grass on 19 days.—*Coventry, Coundon.* Max. temp. 58° on 18th ; min. 29° on 21st and 22nd ; frost on 6 days.

VII. *Loughborough, Victoria Street.* Strong wind at beginning and end of month ; max. temp. 65°·2 on 18th ; min. 27°·2 on 23rd ; S on 21st and 25th.—*Melton, Coston Rect.* Very dry, and warmer than any March of the preceding ten ; the greater part of the month was bright and pleasant, but in the latter part the colder winds made it more wintry ; max. temp. 63°·0 on 18th ; min. 23°·5 on 23rd ; frost on 11 days.—*Stamford, Ketton Hall.* Remarkably fine throughout, the only exception being the night of the 25th, when it was very stormy ; max. temp. 64° on 19th ; min. 25° on 18th and 23rd ; frost in air on 13 days, on grass on 18 days.—*Horncastle, Bucknall.* Max. temp. 62° on 10th ; min. 26° on 23rd ; frost in air on 11 days, on grass on 16 days.—*Nottingham, Strelley Hall.* Temp. 3°·5 above average ; the fourth week, however, was cold ; 33 per cent. of the possible duration of sunshine was recorded, only 3 sunless days ; rainfall about the mean, no R fell from 8th to 19th ; this period was a good time for working the land, however it was impossible to get a good "seed-bed," as there had been no frost on the land in the winter ; vegetation very forward ; reading of bar. (corrected and reduced) at 9 a.m. on 1st 28·801 in., the lowest reading observed during the year.—*Worksop, Hodsock Priory.* Dry, very mild and fairly bright ; the mean temp. (45°·3) is nearly 2° higher than in any March of the previous 6 ; the days were comparatively warmer than the nights, and the mean daily range of temperature was large ; there was a very dry fortnight in the middle of the month ; S.W. winds predominated, no E. ones being recorded ; vegetation very forward.

VIII. *Macclesfield Park.* Remarkably mild, the mean temp. (43°·8) being 4°·2 above the average of 7 years ; scarcely any E. winds. Max. temp. 61°·9 on 16th and 18th ; min. 26°·1 on 22nd ; frost on 5 days.

IX. *Wakefield, Stanley Vic.* A most favourable month for vegetation ; the few frosty nights did little or no damage. Max. temp.

63° on 18th; min. 29° on 21st; frost on 5 days.—*Sedbergh.* Mean temp. 43°·9; max. 57° on 16th; min. 31° on 23rd; frost on 3 days. —*Scarborough.* Comparatively mild, and, with the exception of some H and S showers on the 21st and 22nd, the weather very pleasant. Mean temp. 4°·1 above, and rainfall slightly below, the average. Vegetation about a month in advance. Max. temp. 66°·3 on 16th; min. 31°·6 on 22nd; sea temp. 43°·8, 2°·3 above the 5 years' average.

X. *Barnard Castle, Whorlton.* Warm till the 21st, then cold winds and slight S. Max. temp. 55° on 18th, min. 30°; frost on 8 days.—*Elterwater, Woodlands.* A forward season. Max. temp. 56° on 15th and 29th; min. 30° on 23rd; frost in air on 4 days, on grass on 8 days.—*Shap, Copy Hill.* March came in like a lion, and continued wet and windy for a considerable time, causing land and roads to be in a dreadful condition. On the 11th the weather began to be finer and favourable for sowing corn, but the end of the month was cold and wet, S and sleet having fallen on the mountains..

XI. *Llanfrechfa Grange.* A remarkably warm March; all vegetation very forward; unusual absence of E. wind, more like April, but with cold nights and frosts on the ground in the latter part of the month. Max. temp. 59° on 18th; min. 30° on 4th; frost on 7 days.—*Cardiff, Park Place.* Max. temp. 56°·9 on 15th; min. 31°·5 on 22nd; frost on 2 days.—*Llandovery.* Very mild till the 21st, with wild flowers of every description coming into bloom and some butterflies out. The 21st and 22nd were very wintry, but the latter part of the month was again mild. Max. temp. 56° on 29th, min. 30°; frost on 3 days. —*Llechryd, Castle Malgwyn.* The first part of the month was extremely mild and damp, the latter part stormy, with H and S at intervals.—*Builth, Abergwessin Vic.* Max. temp. 56° on 17th; min. 32° on 3rd.—*Carno, Tybritle.* Max. temp. 51° on 7th, 18th and 19th; min. 24° on 4th; frost on 14 days.—*Menaifron.* Rainfall above the average; dry from 9th to 20th, the rest of the month showery; T on 20th, TS with H on 30th; no frost.

XII. *Dumfries, Crichton Inst.* Damp, cloudy and unpleasant, with little sunshine and a rainfall above the average; the winds were high, prevailing direction westerly, and the hills were frequently covered with S. Vegetation well advanced. Max. temp. 57°·3 on 9th; min. 27°·6 on 21st; frost on 8 days.—*Melrose, Abbey Gate.* Mean temp. (40°·1), 3°·1, and rainfall ·28 in., above the average; wind from W. and S.W. on 21 days; frequent gales, especially in the

beginning. A favourable month on the whole, vegetation making rapid progress. Max. temp. 57°·4 on 29th, min. 23°·4 on 7th; frost on 20 days.

XIII. *North Esk Res.* [*Pennicuick*]. Max. temp. 58° on 16th, min. 26° on 7th, 21st, and 22nd; frost on 10 days.

XIV. *Ayr, Cassillis House.* Max. temp. 59° on 16th, min. 21° on 31st; frost in air on eight days, on grass on 17 days.—*Glasgow, Queen's Park.* Max. temp. 55° on 10th, min. 30° on 22nd and 31st.

XVIII. *Lochbroom.* By far the most rainy month since observations were commenced in 1865; it rained every day, and the amounts were almost always considerable. The weather was not cold, but it was very stormy, and though H, S, and sleet were frequent, they did not lay on the ground. Stock in good condition, and farm work well advanced.—*Glenaladale, Loch Shiel.* The first two days were mild and beautiful, but the remainder of the month was boisterous, with R every day but the 15th; at times cold, and with S, sleet, and H in the latter part.

XIX. *Watten, H.R.S.* The most wintry month of the season; cloudy and cold throughout, with boisterous winds.

XX. *Waterford, Newtown.* Max. temp. 59°·5 on 24th, min. 31° on 12th; frost on three days.—*Newcastle West.* The second week was dry and fine, but the remainder of the month was unfavourable for agriculturists.—*Miltown Malbay.* Very wet and ungenial; only five days without R. Vegetation very forward on dry soils, tillage in arrear, owing to wet.

XXI. *St. Mullins* [*Graigue*]. Max. temp. 56° on 23rd, min. 32° on 11th, 20th, and 21st; frost on three days.

XXII. *Ballinasloe.* Generally wet and cold, with S in the middle; the latter part colder than the earlier, and much wilder and more stormy. Max. temp. 59° on 7th, min. 31° on 21st; frost on two days.

XXIII. *Seaforde.* Max. temp. 60° on 9th and 28th, min. 26° on 21st; frost in air on four days, on grass on 12 days.—*Belfast, New Barnsley.* A fine spring month, not much frost, but sufficiently cold to retard, though not to injure, vegetation.—*Bushmills.* Max. temp. 58° on 18th, min. 30° on 20th; frost on four days.—*Ramelton, Killygarvan.* A fair average month; much high wind, but no severe frosts. Mean temp. 42°·9, 1°·5 above the average, max. 55° on 28th, min. 29° on 21st; frost on five days.—*Buncrana.* The month was chiefly remarkable for the prevailing high winds from W. and S.W., but the dry

weather during the first 19 days was favourable to farming operations. Max. temp. 64° on 22nd, min. 31° on 20th; frost on two days.

APRIL.

I. *Muswell Hill.* Rainfall about 68 per cent. above the average, and only once exceeded in April during ten years; no R was recorded during the first 11 days, whilst of the remaining nineteen, only the 20th and 26th were free from R.—*Pinner Hill.* Max. temp. 62° on 20th; min. 32° on 15th.

II. *Dorking, Abinger Hall.* Fine until the 12th, but from that date to the end of the month very unsettled and stormy.—*Croydon, Addiscombe.* Warm, exceptionally wet, and extremely windy; this month was of a generally equable temperature; it was also remarkable for the large amount of R deposited after the 12th, and especially for a violent and prolonged gale on the 29th; bar. very low.—*Hythe.* Max. temp. 67°·0 on 7th; min. 36°·5 on 10th and 25th.—*Bromley Common.* Max. temp. 66° on 20th; min. 29° on 16th; frost on 5 days.—*Eastbourne.* Max. temp. 61°·4 on 6th; min. 35°·3 on 16th; frost on grass on 7 days.—*St. Leonards.* The first 11 days warm, with R on only one day, but frequent R afterwards, and the temp. fell; max. temp. 62°·3 on 6th; min. 37°·1 on 16th; frost on grass on 7 days.—*St. Lawrence.* A lovely month. The gale on 29th did irreparable damage to all kinds of fruit, wheat, potatoes, &c., the salt blown from the sea blackening almost everything. Max. temp. 62°·3 on 5th; min. 37°·0 on 10th.—*Alton, Ashdell.* Max. temp. 64° on 4th; min. 33° on 10th; frost on grass on 12 days.

III. *Buntingford, Throcking Rectory.* Bright and dry during first half, last week very wet; 1·04 in. of R fell on 25th. Mean temp. 46°·1; max. 69°·1 on 21st; min. 29°·2 on 16th.—*Winslow, Addington.* The early part of the month was fine, but from the 12th to the end, the weather was unsettled and stormy; heavy S.W. gales, and heavy R at the end, bar. at times very low. Rainfall much above the average. Max. temp. 64° on 20th; min. 27° on 16th; frost in air on 3 days, on grass on 12 days.—*Oxford, Magdalen Col.* Max. temp. 64° on 20th and 21st; min. 32° on 16th; frost on grass on 7 days.—*Banbury, Wroxton.* Max. temp. 67° on 21st; min. 28° on 16th; frost on 3 days.—*Cambridge, Beech House.* Max. temp. 62° on 21st; min. 32° on 15th.

IV. *Southend.* Max temp. 68°·2 on 21st; min. 32°·5 on 16th. —*Harlow, Sheering.* Rainfall 1·18 in. above average. Max. temp. 62° on 21st; min. 31° on 16th; frost on grass on 10 days. *Ipswich, Bishop's Hill.* The wettest April since 1871, rainfall more than double the average.—*Beccles, Ellough Rect.* Max. temp. 62° on 22nd; min. 28° on 16th; frost on 5 days.—*Diss.* Beautifully mild until 12th; thence to the end, true April weather with a heavy gale on 29th, and storms at intervals, there were few days, however, without some brilliant sunshine, and the frosts were slight; with the exception of wheat, which is attacked by blight, the crops look well.—*Hindringham.* Max. temp. 68° on 21st; min. 32° on 9th.

V. *Calne, Compton Bassett.* First 11 days very fine, bright and dry; thence to the end squally and rainy, with a few slight frosts; max. temp. 62° on 21st; min. 31° on 10th; frost in air on two days, on grass on 8 days.—*Langton Herring.* Rainfall slightly more than the total of the preceding three months, and 1·66 in. above the average. In the first half of the month E. winds prevailed, and the weather was fine; in the latter half, W. winds and wet were generally experienced; mean temp. above the average; max. 62° on 15th; min. 35° on 10th, 11th, and 16th.—*Torquay, Babbacombe.* Mild and very wet, wetter and warmer than any April of the previous five; the rainfall was nearly thrice the average, and the heaviest in any month since October 1880; R fell on the first 4 days, and on every day after the 10th, excepting the 20th, but very fine weather prevailed from the 5th to the 10th. Temp. slightly above the average; bar. generally low; winds variable, S.W. gales occurring on three days. H on 5 days, and fogs on 6 days; max. temp. 64°·3 on 20th; min. 33°·9 on 11th; frost on grass on 11 days.—*Ashburton, Druid.* Max. temp. 62° on 20th; min. 35° on 29th.—*Teignmouth, Woodway.* Rainfall 2·75 in. above average, number of wet days also large; max. temp. 66°·4 on 20th; min 33°·8 on 26th; frost on grass on 6 days.—*Exeter, Brampford Speke.* Very stormy, rainfall more than double the average; violent gale on 29th, damaging foliage.

VI. *Clifton, South Parade.* The largest rainfall in April during 30 years; max. temp. 67°·5 on 21st; min. 32°·3 on 16th; frost on grass on 6 days.—*Newnham-on-Severn.* First half of month sunny; much R after 18th; max. temp. 72° on 21st.—*Cheltenham.* The former part very fine and beautiful; the latter part cold, wet, and ungenial; a sharp frost on night of 16th killed asparagus and some potatoes; max. temp. 62°·0 on 20th and 21st; min.

26°·5 on 16th; frost in air on 5 days, on grass on 8.—*Ross, The Graig.* The first part of the month, fine bright, and warm, the latter part cool and showery; with one exception (1878) the wettest April since 1859. Vegetation forward; max. temp. 63° on 20th; min. 29° on 16th; frost in air on 3 days, on grass on 8 days.—*Cheadle.* Max. temp. 59°·5 on 20th and 21st; min. 29°·2 on 16th; frost in air on 5 days, on grass on 14 days.—*Coventry, Coundon.* Max. temp. 60° on 8th and 19th; min. 30° on 15th.

VII. *Spilsby, Partney.* Max. temp. 60° on 21st; min. 26° on 16th; frost on 3 days.—*Melton, Coston Rect.* Rainfall considerably above the average; temp. moderately high, the mean being reduced by several very cold nights; vegetation very forward; max. temp. 63° on 21st; min. 24° on 16th; frost on 6 days.—*Stamford, Ketton Hall.* The early part of the month fine, but from the middle to the end showery and unsettled; max. temp. 61° on 13th; min. 28° on 16th; frost on 4 days. —*Worksop, Hodsock Priory.* A wet month of average temperature and low pressure; the rainfall is the largest in any April since 1877; bright sunshine 34 per cent. of the possible duration.—*Nottingham, Strelley Hall.* Rainfall about an inch above average; temperature about the mean, though the last week was cold.

VIII. *Macclesfield Park.* Rainfall 1·45 in. above the average of 30 years. Mean temp. 3°·8 below the average; max. 62°·5 on 19th; min. 27°·1 on 16th; frost on 4 days.

IX. *Wakefield, Stanley Vic.* A most favourable month for vegetation, grass and corn much earlier than the average. Max. temp. 64° on 21st; min. 29° on 15th; frost on 4 days.—*Sedbergh.* Mean temp. 45°·8; max. 59° on 8th and 9th; min. 31° on 16th.—*Scarborough.* Very fine until the 12th, when R set in and continued without intermission till the 15th, after which date it fell almost daily. Mean temp. 2°·9 above average; max. 63°·3 on 21st; min. 31°·5 on 16th. —*East Layton* [*Darlington*]. The month commenced rather squally, the winds being cold and ungenial; heavy rains prevailed towards the end of the month, and the ground became thoroughly saturated. Max. temp. 66° on 21st; min. 26° on 16th.

X. *Barnard Castle, Whorlton.* Very fine at the beginning of the month, then cold and frosty. Max. temp. 55° on 20th; min. 35° on 27th.—*Haltwhistle, Unthank Hall.* Max. temp. 55° on 19th and 21st; min. 26° on 15th; frost on 6 days.—*Elterwater, Woodlands.* A very changeable month; splendid weather from 6th to 11th inclusive; warm days and frosty nights; plants much damaged by frost. Max.

temp. 63° on 8th; min. 25° on 16th; frost on 8 days.—*Shap, Copy Hill.* The month began with cold winds from E. and N.E. and frosty nights, which checked vegetation; land fresh and green, but in a wet state.

XI. *Llanfrechfa Grange.* Rainfall 2·50 in. above average; latter part of the month much colder and more stormy than the beginning. Max. temp. 61° on 26th; min. 32° on 16th.—*Cardiff, Park Place.* Max. temp. 61°·5 on 8th; min. 31°·3 on 20th.—*Llandovery.* A very cold April and very wet during the latter part, preventing the sowing of oats and barley. Max. temp. 65° on 13th; min. 30° on 10th and 11th; frost on 3 days.—*Llechryd, Castle Malgwyn.* Very cold and wet. —*Builth, Abergwessin Vic.* Max. temp. 58° on 22nd; min. 31° on 10th. —*Rhayader, Nantgwillt.* By far the wettest April since 1868, the fall being considerably more than double the average.—*Carno, Tybritle.* Max. temp. 56° on 19th and 21st; min. 24° on 11th and 16th; frost on 8 days.—*Menaifron.* Warm and wet up to the 13th; total R considerably above the average; N.E. gale on 29th with cold R.—*Douglas, Victoria Road.* A wretched month, cold, with frequent gales and abnormally large rainfall. Spring very backward.

XII. *Dumfries, Crichton Inst.* Wet, cold, and ungenial, with little sunshine; frosty mornings were frequent, especially during the first half of the month; E. winds prevalent until towards the end of the month, when the direction changed to S. and W.; H showers were not uncommon, and vegetation made little progress; max. temp. 59°·6, on 9th; min. 23°·5, on 16th; frost on 9 days.—*Melrose, Abbey Gate.* All kinds of crops looking well, although checked by the frosty nights and cold E. winds; north and east winds prevailed on 19 days; rainfall 1·56 in. above the average; mean temp. (40°·7) 0°·4 below the average; max. 59°·0, on 20th; min. 17°·6, on 16th; frost on 19 days.

XIII. *North Esk Res.* [*Penicuick*]. Max. temp. 54° on 20th and 21st; min. 22° on 16th; frost on 7 days.

XIV. *Ayr, Cassillis Ho.* Max. temp. 64° on 8th; min. 21° on 9th and 16th; frost on 11 days.—*Glasgow, Queen's Park.* Max. temp. 58° on 8th and 18th; min. 29° on 10th and 27th; frost on 3 days.

XVI. *Dollar.* Cold ungenial weather the whole month.

XVIII. *Lochbroom.* A very fine month for farming operations, agriculture prosperous and forward.—*Loch Shiel, Glenaladale.* Beautiful weather until the 12th, bright and clear with hot sun and slight frosts at night, wind E.; from 13th to 19th unsettled and stormy with S, remainder of month fine, but cold.

XIX. *Watten H.R.S.* First half of the month favourable for sowing, though cold and inclined to frost at night, latter half cold, stormy, and almost sunless.

XX. *Fermoy, Glenville.* The wettest April remembered here.—*Tipperary, Henry Street.* Weather cold and harsh, especially towards the close of the month.—*Nenagh, Castle Lough.* The first few days rainy, followed by a week of very fine weather, and the remainder of the month again rainy, heavy fall of S on 27th, mixed with H and sleet, on 29th the hills were covered with S. The sowing of potatoes and oats seriously retarded, and the spring, which promised to be three weeks earlier than usual, rather later than the average at the end of the month.—*Newcastle West.* A bad month, weather never settled long enough for planting—*Kilrush.* Wet, wild, and cold, vegetation very backward; deaths very numerous, fever prevalent.—*Miltown Malbay.* With the exception of one beautiful week about Easter, the month was the most rainy and inclement April remembered here, with frequent gales of wind; the last week resembled January rather than the approach of summer, being stormy with S, sleet, H, frost and excessive R.

XXI. *St. Mullin's* [*Graigue*]. Max. temp. 58° on 20th and 21st; min. 31° on 29th; frost on 4 days.—*Athlone, Twyford.* Max. temp. 62° on 21st; min. 31° on 16th; frost in air on 2 days, on grass on 15 days.

XXII. *Ballinasloe.* Very cold, with constant rain, except from 6th to 11th inclusive; vegetation almost stopped, high and very sudden floods occurred at the end of the month, the water having, over a very flat country, risen 9 in. in 12 hours, potato tops much damaged by frost. Max. temp. 59° on 20th; min. 28° on 16th; frost on 3 days.

XXIII. *Seaforde.* Max. temp. 60° on 8th and 22nd; min. 27° on 9th; frost in air on 8 days, on grass on 14 days.—*Belfast, New Barnsley.* Fine from 5th to 11th, after that date cold and wet, with occasional frosts, keeping back, but not materially checking, vegetation.—*Bushmills.* Max. temp. 66° on 20th; min. 26° on 9th; frost on 8 days.—*Stewartstown.* The rainfall was not above the average, but the number of rainy days was large, and kept back agricultural operations.—*Ramelton, Killygarvan.* A changeable month, some sharp frosts at night, and bright sunshine during day, with two ordinary gales, and rainfall only a little above the average. Mean temp. 44°, or 2° below the average; max. 61° on 23rd; min. 26° on 16th and 30th; frost on 8 days.—*Buncrana.* Cold and ungenial, more like March than April.

MAY.

I. *Muswell Hill.* Rainfall scarcely three quarters of the average, there was a period of 14 days without R (except ·03 in. on 15th) from 6th to the 19th inclusive.—*Pinner Hill.* Max. temp. 71° on 29th; min. 36° on 15th.

II. *Croydon, Addiscombe.* Very warm, singularly dry, and extremely bright. The duration of sunshine during the 8 days ending on the 20th averaged very nearly 11¾ hours a day.—*Hythe.* Very fine and dry, prevailing winds E. Max. temp. 73°·0 on 28th; min. 41°·5 on 17th.—*Bromley Common.* Fine and dry, ice on the ground on 17th; max. temp. 74° on 29th; min. 32° on 17th.—*Eastbourne.* Max. temp. 73°·4 on 28th; min. 37°·8 on 16th; frost on grass on 8 days.—*St. Leonards.* The month had much sunlight, and was on the whole very pleasant. Easterly winds prevailed in the middle and at the end of the month. Max. temp. 67°·1 on 31st; min. 40°·2 on 9th.—*St. Lawrence.* A lovely month; showers from 23rd to 26th, most refreshing, hay cutting begun in the last week. Trees beginning to recover somewhat from the blighting gale of April 29th. Rainfall ·52 in. below the average. Max. temp. 68°·8 on 30th; min. 40°·2 on 5th.—*Alton, Ashdell.* Max. temp. 69° on 30th; min. 35° on 16th; frost on grass on 8 days.

III. *Buntingford, Throcking Rect.* Bright and dry; no R between 5th and 22nd, or after 25th. Mean temp. 51°·2, max. 69°·6 on 28th, min. 33°·9 on 16th. T and L on 3rd, T on 22nd.—*Winslow, Addington.* First week unsettled; from 7th to 21st very fine and dry; from 22nd to 27th unsettled, and remainder very fine. Max. temp. 70° on 22nd and 28th, min. 31° on 17th; frost on grass on eight days.—*Oxford, Magdalen Coll.* Max. temp. 67° on 10th and 22nd, min. 36° on 16th and 17th; frost on grass on four days. *Banbury, Wroxton.* Max. temp. 73° on 23rd, min. 32° on 16th; T on five days.—*Cambridge, Beech House.* Max. temp. 68° on 28th and 29th, min. 35° on 15th.

IV. *Southend.* Max. temp. 72°·9 on 27th, min. 36°·4 on 17th.—*Harlow, Sheering.* Max. temp. 70° on 29th and 30th, min. 34° on 17th; frost on grass on five days.—*Beccles, Ellough Rectory.* Max. temp. 74° on 30th, min. 32° on 16th, 17th, and 18th.—*Diss.* During the first eight days the weather was wet and unsettled, but the remainder of the month was very brilliant, with the exception of the 25th, when heavy R occurred. The cereals, which were looking

badly at the end of April, have greatly improved, and other crops promise well, but the damage done to foliage by the heavy gale and *salt* (?) rain of April 29th is very conspicuous.—*Hindringham.* Max. temp. 74° on 28th, min. 36° on 16th.

V. *Salisbury, Alderbury.* Max. temp. 79° on 31st, min. 37° on 8th. —*Calne, Compton Bassett.* Dull and showery for the first five days, then dry, bright, and sunny till the 20th; a rainy week followed, and the last five days were clear and fine, but rather windy. Max. temp. 68° on 23rd, min. 33° on 16th; frost on grass on six days.—*Weymouth, Langton Herring.* Fine, with mean temp. 2°·9 above the average, and higher than that of any May of the preceding ten. Max. temp. 73° on 30th, min. 36° on 15th.—*Torquay, Babbacombe.* Dry and generally fine, rainfall about two-thirds of the average, none being measured in the 14 days from 6th to 19th; temp. and pressure about the average. E. winds prevailed on 14 days, and S.W. on eight days. Max. temp. 66°·7 on 11th, 28th, and 30th; min. 37°·5 on 17th; frost on grass on four days.—*Ashburton, Druid.* Max. temp. 66°·3 on 29th, min. 36°·5 on 15th.—*Teignmouth, Woodway.* Max. temp. 72°·1 on 30th, min. 36°·4 on 16th.

VI. *Clifton.* Max. temp. 72°·4 on 22nd; min. 36°·2 on 16th.—*Newnham-on-Severn.* Very dry, with much E. wind until the 21st; then W. or S.W.—*Cheltenham.* Mean temp. 1°·4 above, and rainfall 0·57 in. below, the average; max. temp. 68°·3 on 30th; min. 31°·8 on 17th.—*Ross, The Graig.* Fine on the whole, but the N.E. wind proved destructive to some fruit trees, and retarded vegetation; very wet from 22nd to 27th inclusive; max. temp. 71°·4 on 10th; min. 34°·6 on 16th; frost on grass on three days.—*Wem, Sansaw Hall.* Max. temp. 68° on 19th; min. 33° on 16th; frost on grass on 19 days.—*Cheadle.* The month commenced with some T and L and sharp frosts, and the first three weeks were cold with E. winds; the latter part much warmer, and vegetation made rapid progress; max. temp. 68° on 23rd; min. 32° on 16th; frost on grass on 7 days.—*Coventry, Coundon.* Max. temp. 71° on 22nd; min. 36° on 8th and 16th.

VII. *Loughborough, Victoria St.* No R from 8th to 21st; max. temp. 72° on 30th; min. 33°·1 on 17th.—*Melton, Coston Rect.* Very fine with the exception of the two periods 3rd to 7th, and 22nd to 27th; T and L rather frequent during those periods; the crops look promising, and vegetation is very forward; max. temp. 68°·5 on 22nd; min. 29°·5 on 9th.—*Stamford, Ketton Hall.* Very fine, with little frost, and slight rainfall; max. temp. 71° on 23rd; min. 31° on

9th, 17th, and 18th.—*Horncastle, Bucknall.* Max. temp. 70° on 22nd; min. 32° on 16th; frost in air on 2 days; on grass on 9 days.—*Nottingham, Strelley Hall.* Sunny, with large range of temp.; 245 hours (or 51 per cent. of possible duration) of sunshine, were recorded, the most recorded during any month this or last year; temperature and rainfall above the average; from 10th to 22nd no R fell; from 22nd to 29th 1·59 in. of R fell; this wet hindered turnip sowing, those sown before were badly attacked by fly during the dry period. —*Worksop, Hodsock Priory.* Very fine and bright, with average pressure and temperature; rather less than average rainfall; daily range of temperature large; sunshine equal to 51 per cent. of the possible duration; a slight increase on May last year, which was a very similar month.

VIII. *Macclesfield Park.* Fine and genial except from 19th to 21st inclusive, spring flowers earlier than usual. Mean temp. exactly the average; rainfall only 61 per cent. of the average. Max. temp. 67°·1 on 22nd; min. 33°·5 on 16th.—*Knutsford.* Max. temp. 72°·9 on 22nd; min. 34°·0 on 16th and 17th.

IX. *Wakefield, Stanley Vic.* Max. temp. 69° on 23rd; min. 33° on 15th, 16th and 17th.—*Sedbergh.* Mean temp. 53°; max. 73° on 22nd: min. 35° on 1st and 16th.—*Scarborough.* Fine and bright; mean temp. (51°·1), 1°·1 above the average, but slightly below that of May, 1881; rainfall ·73 in. below average. Max. temp. 68°·8 on 29th; min 36°·6 on 9th.—*East Layton* [*Darlington*]. Very fine growing weather; corn looking remarkably well; fruit crops a good average; a very early season. Min. temp. 34° on 9th and 17th.

X. *Haltwhistle, Unthank Hall.* Max. temp. 67° on 31st; min. 32° on 5th and 16th.—*Elterwater, Woodlands.* A splendid spring in this district. Max. temp. 72° on 18th; min. 30° on 16th; frost on grass on 8 days.—*Shap, Copy Hill.* For several days no R fell, the land got very dry, the rivers were remarkably low for the time of year, and in some instances water was hard to procure; this, coupled with hot sun during the day and hard frosts at night, was trying for the farmers; but on the 23rd and following days considerable quantities of R fell.

XI. *Llanfrechfa Grange.* Max. temp. 69° on 28th and 30th; min 37° on 15th.—*Cardiff, Park Place.* Max. temp. 69°·1 on 31st; min. 39°·5 on 15th and 16th.—*Llechryd, Castle Malgwyn.* Rather cold, though the days were generally fine.—*Carno. Tybrith.* Max. temp. 66° on 31st; min. 29° on 15th; frost on 5 days.—*Menaifron.* Mostly fine and warm;

nine consecutive dry days in the middle of the month; distant T on 18th and 21st; TS on 23rd.—*Douglas, Victoria Rd.* Very fine; from 11th to end of month almost unclouded sunshine, with cold nights and dry winds, parching vegetation.

XII. *Dumfries, Crichton Inst.* Dry, but not ungenial, the first week rather showery, but the total rainfall much below the average; mean temp. rather low, the prevalent winds being E. and S.E.; the latter half of the month was much warmer than the first part. Mean pressure high, and T frequent. Max. temp. 73° on 19th; min. 35° on 10th.—*Melrose, Abbey Gate.* Mean temp. 0°·3 below, and rainfall ·26 in. above, the average; cuckoo heard on the 1st; oak in leaf on 2nd, and the ash on the 28th. Max. temp. 74°·5 on 19th; min. 23°·8 on 9th; frost on 12 day.

XIII. *North Esk Res.* [*Penicuick*]. Max. temp. 68° on 19th; min. 31° on 9th.

XIV. *Ayr, Cassillis House,* Max. temp. 71° on 22nd; min. 25° on 16th; frost in air on 8 days, on grass on 13 days.—*Glasgow, Queen's Park.* Max. temp. 77° on 18th; min. 34° on 1st, 3rd, and 15th.

XVIII. *Lochbroom.* A most beautiful month.—*Loch Shiel, Glenaladale.* A beautiful month, very favourable to vegetation; temp. generally high; from the 12th to 22nd, very parching with intense heat during the day, but generally slight frost at night; on the whole very little wind.

XIX. *Watten, H.R.S.* The first 10 days were cold; the rest of the month was fine, with more than an average amount of sunshine, altogether an unusually fine May.

XX. *Nenagh, Castle Lough.* The nights were cold throughout the month, occasionally with frost on grass.—*Tipperary, Henry St.* Very fine until towards the close of the month.—*Newcastle West.* A splendid month, very sultry with E. winds from 10th to 21st.—*Miltown Malbay.* Rather dry, the early half rather cold, with parching winds and white frost in the mornings. After the 22nd milder.

XXI. *St. Mullins* [*Graigue*] Max. temp. 64° on 19th; min. 36° on 6th.—*Athlone, Twyford.* Max. temp. 67° on 23rd and 31st; min. 36° on 6th; frost on grass on 10 days.

XXII. *Ballinasloe.* The month was generally cold and wet (except for about 9 days in the middle); max. temp. 66° on 22nd and 31st; min. 36° on 1st and 4th.

XXIII. *Seaforde.* Max. temp. 74° on 23rd; min. 30° on 4th; frost in air on 4 days, on grass on 6 days.—*Belfast, New Barnsley.* The

finest May for many years, from 11th to 21st, nearly continual sunshine throughout the day. The showers after the 22nd produced a most marked improvement in the crops.—*Bushmills.* Max. temp. 72°·3 on 23rd; min. 28° on 4th; frost on 2 days. *Ramelton, Killygarvan.* A fine month with a great many brilliant days, and a large variation of temp. between night and day, one sharp frost at night, and two days of high wind; mean temp. (49°·7) 1°·0 below the average; max. 72° on 18th; min. 27° on 5th; frost on 3 days.—*Buncrana.* Max. temp. 79° on 18th; min. 34° on 4th.

JUNE.

I. *Muswell Hill.* Rainfall slightly below the average, but as it was distributed over a large number of days (21), the month appeared a wet one.—*Pinner Hill.* Max. temp. 72° on 24th, min. 42° on 15th.

II. *Dorking, Abinger Hall.* Cold, showery, and somewhat sunless. Potato disease appeared in the last week and spread rapidly.—*Croydon, Addiscombe.* Cold, humid, windy, and dull; bar. and rainfall about average. Remarkable for the great coolness of the air during the daytime, and the continued prevalence of south-westerly and westerly winds.—*Hythe.* A very unsettled month. Max. temp. 74°·5 on 28th, min. 41° on 12th.—*Bromley Common.* Showery and unsettled, cold at the beginning but warmer at the close; hay a good crop. Max. temp. 73° on 27th, min. 40° on 13th.—*Littlehampton.* Very ungenial; max. temp. 72° on 3rd and 30th, min. 36° on 13th. *Eastbourne.* Max. temp. 71°·4 on 2nd, min. 42°·6 on 13th and 16th. —*St. Leonards.* Cool and cloudy, with frequent R; max temp. 67°·1 on 3rd, min. 40°·3 on 13th.—*St. Lawrence.* Max. temp. 67° on 28th, min. 41°·8 on 13th.—*Alton, Ashdell.* Max. temp. 71° on 28th, min. 37° on 13th.

III. *Buntingford, Throcking Rect.* Showery and unsettled, with low temp; mean temp. 54°·3; max. 71°·3 on 29th; min. 39°·5 on 13th; solar halo on 17th; T on 5 days; H on 2 days.—*Winslow, Addington.* Cold, wet, and unfavourable, R frequent; hay-cutting began about the usual time, but was much hindered; max. temp. 72° on 27th; min. 37° on 16th and 17th; frost on grass on 2 days.—*Oxford, Magdalen Coll.* Max. temp. 70° on 29th; min. 42° on 17th. —*Banbury, Wroxton.* Max. temp. 74° on 29th; min. 40° on 13th.—*Cambridge, Beech House.* Max. temp. 70° on 29th; min. 41° on 12th and 15th.

IV. *Southend.* Max. temp. 74°·9 on 27th; min. 41°·2 on 13th.—*Harlow, Sheering.* Rainfall 0·52 in. above the average; max. temp. 72° on 29th; min. 40° on 16th.—*Ipswich, Bishop's Hill.* Unusually cold, rainfall nearly half an inch above the average.—*Beccles, Ellough Rectory.* T was heard on 9 days during the month; max. temp. 73° on 30th; min. 36° on 17th.—*Diss.* The month opened with fine weather, but the gathering of the magnificent hay crop was somewhat impeded by wet; corn crops greatly improved, garden produce abundant.—*Hindringham.* Max. temp. 71° on 20th; min. 41° on 16th.

V. *Salisbury, Alderbury.* Max. temp. 75° on 1st and 16th; min. 40° on 13th.—*Calne, Compton Bassett.* Very cold, wet, and unsettled, except the last two days, which were very fine and summerlike; max. temp. 70° on 29th; min. 38° on 13th; frost on grass on 1 day. —*Weymouth, Langton Herring.*—A wet month, mean. temp. 0°·7 below the average; max. temp. 73° on 30th; min. 41° on 13th.—*Torquay, Babbacombe.* Cold, wet, and cloudy, rainfall about 50 per cent. above the average; but chiefly in showers; very cold from the 11th to 13th, but the last 3 days warm; the prevalent winds were S.W. and N.W., frequently strong during the first 14 days.—*Ashburton, Druid.* Max. temp. 72°·0 on 30th; min. 40°·3 on 13th.—*Teignmouth, Woodway.* Max. temp. 75°·4 on 30th; min. 39°·7 on 13th.

VI. *Clifton.* Max. temp. 73°·6 on 30th; min. 43°·7 on 13th and 16th.—*Newnham-on-Severn.* Stormy throughout.—*Cheltenham.* Cold and wet; max. temp. 73°·0 on 29th and 30th; min. 34°·5 on 16th.—*Ross, The Graig.* Cold and showery, except the last 4 days; more remarkable for the number of wet days and absence of high temp. than for total rainfall, which is only just above the average; max. temp. 77°·3 on 29th; min. 38°·5 on 17th.—*Wem, Sansaw Hall.* Max. temp. 73° on 31st; min. 40° on 17th; frost on grass on 2 days. —*Cheadle.* Max. temp. 69°·5 on 29th; min. 40°·6 on 13th.—*Coventry, Coundon.* Max. temp. 74° on 28th; min. 42° on 12th.

VII. *Melton, Coston Rectory.* Very cold and wet, with frequent TSS; max. temp. 69°·8 on 29th. min. 38° on 1st and 17th.—*Nottingham, Strelley Hall.* Cold, wet, and sunless; rainfall about 1 in. above average; temp. about 3° below average. Only 27 per cent. of possible duration of sunshine recorded; there was only one entirely sunless day.—*Worksop, Hodsock Priory.* Colder and wetter than in any of the preceding seven years; the sunshine amounted to only 32 per cent. of the possible duration; vegatation scarcely advanced during the month.

VIII. *Macclesfield Park.* Rainfall more than twice the average, and the heaviest monthly rainfall since June, 1872. Max. temp. 67°·2 on the 30th, min. 39°·1 on 13th.—*Knutsford.* Max. temp. 70°·9 on 26th, min. 41°·3 on 17th.—*Liverpool, Walton-on-the-Hill.* A cold month, shade temp. did not once reach 70°.

IX. *Wakefield, Stanley Vic.* Max. temp. 73° on 30th, min. 39° on 12th.—*Sedbergh.* Mean temp. 55°·2, max. 78° on 30th, min. 38° on 13th.—*Scarborough.* Mean temp. 54°·7, 1°·1 below the average; rainfall 1·27 in. above it. The R fell chiefly at night. Max. temp. 65°·8 on 4th, min. 42°·6 on 13th.—*East Layton* [*Darlington*]. The month commenced favourably, and things grew rapidly, but on the 11th a cold N. wind set in, arresting all vegetation. Towards the end of the month, however, some very hot sunshine caused everything to grow with marvellous rapidity, the soil being very moist.

X. *Haltwhistle, Unthank Hall.* Max. temp. 72° on 29th; min. 34° on 12th.—*Elterwater, Woodlands.* Max. temp. 74° on 2nd and 30th; min. 36° on 17th.—*Shap, Copy Hill.* Rather wet, with much T and L; hay time began about 27th; grass a very good crop; corn, potatoes and turnips looking well.

XI. *Llanfrechfa Grange.* Unusually wet and cold. Max. temp. 73° on 28th; min. 40° on 17th.—*Cardiff, Park Place.* Max. temp. 72°·4 on 30th; min. 41°·3 on 17th.—*Llandovery.* Very wet and cold; hay harvest very backward; cold E. winds at the beginning of the month. Max. temp. 75° on 30th; min. 40° on 16th.—*Lechryd, Castle Malgwyn.* Very damp with cold winds.—*Builth, Abergwessin Vic.* Max. temp. 70° on 30th; min. 39° on 7th.—*Carno, Tybrith.* Max. temp. 70° on 30th; min. 32° on 17th.—*Menaifron.* Much wetter than the average.

XII. *Dumfries, Crichton Inst.* Rather moist; R fell on 20 days, and the fall was considerably above the average; the first half of the month cold, but the latter part warm and fine. Mean temp. was fully 2° below the average, the winds generally light, chiefly from S. and W.; T on 5 days, but no severe TSS. Vegetation advanced. Max. temp. 70°·4 on 30th; min. 35°·0 on 12th.—*Melrose, Abbey Gate.* Rainfall excessive, 2·25 in. above the average, due principally to the frequent TSS; mean temp. 2°·5 below the average; wind from S. or W. on 15 days. Crops looking well. Max. temp. 77°·8 on the 30th; min. 29°·7 on the 17th; frost on 6 days.

XIII. *North Esk. Res.* [*Penicuick*]. Frequent T. Max. temp. 67° on 28th and 29th; min. 31° on 16th; frost on 2 days.

XIV. *Ayr, Cassillis House.* First half of the month wet, latter part

very warm. Max. temp. 76° on 30th; min. 27° on 24th; frost on 2 days.—*Glasgow, Queen's Park.* Max. temp. 75° on 30th; min. 38° on 13th.

XVI. *Dollar.* Cold till towards the end, then fine and warm.

XVIII. *Lochbroom.* A beautiful month.—*Loch Shiel, Glenaladale.* Temp. normal, with the exception of a very cold week beginning on the night of the 10th, when a considerable quantity of S fell on the high hills.

XIX. *Watten, H.R.S.* A good month, mild and growing, though there was too much R and too little sun.

XX. *Tipperary, Henry St.* Very cold for the season and wet; only 4 days without R.—*Castle Lough.* The falls of R, though not large, were very frequent, only 7 days being dry; the nights during the middle of the month were very cold, and the weather generally was by no means genial.—*Kilrush.* Very changeable, wet, wild and cold for the season; health very good.—*Miltown Malbay.* Very boisterous, cold, ungenial; all crops stunted and perishing from cold and want of sun; potato blight appeared on early sorts on the 1st; the last three days of the month fine and warm.

XXI. *St. Mullins* [*Graigue*]. Max. temp. 69° on 29th and 30th; min. 40° on 11th and 14th.—*Athlone, Twyford.* Max. temp. 76° on 30th; min. 39° on 16th; frost on grass on 1 day.

XXII. *Ballinasloe, Kilconnell.* Abnormally cold and wet.—*Ballinasloe.* Cold and raw, with a few warm days at the end. Early potatoes slightly blighted. Max. temp. 75° on 30th; min. 37° on 16th.

XXIII. *Seaforde.* Max. temp. 78° on 30th; min. 37° on 15th.—*Belfast, New Barnsley.* Cold, dull, and wet until the 12th, more like January than June; after the 16th, the weather improved, getting gradually warmer, and becoming very hot in the last few days. Vegetation made rapid progress during the last fortnight.—*Bushmills.* Max. temp. 78°·3 on 1st; min. 40° on 22nd.—*Ramelton, Killygarvan.* Wet, with occasional fine days, and two gales of wind; temp. below the average, rainfall 2·00 in. above average; mean temp.; 53°·2; max. 74° on 27th and 30th; min. 35° on 1st.—*Buncrana.* Max. temp. 70° on 1st, 27th, and 30th; min. 41° on 11th.

JULY.

I. *Muswell Hill.* Total R slightly less than the average, but it was distributed over 20 days, which is six more than the average number

in July —*Pinner Hill.* Max. temp. 77° on 4th, min. 46° on 8th and 9th.

II. *Dorking, Abinger Hall.* Another unfavourable July, though not so wet as July, 1881. It has been very injurious to the farmer and gardener; great damage done to the crops.—*Croydon, Addiscombe.* Temp. equable but low; rather wet and very windy. July was remarkable for the absence of any hot day, for the great prevalence of strong south-westerly winds, and generally for its unsettled character and similarity in other respects to the previous month. Bar. very low. —*Hythe.* Very unsettled and showery; much hay damaged. Max. temp. 73°·5 on 30th, min. 48° on 26th.—*Littlehampton.* Very rough winds, tender foliage blackened and much destroyed; three or four very heavy sea-fogs at night; temp. low; no T nor L. Max. temp. 78° on 30th, min. 43° on 20th.—*Eastbourne.* Max. temp. 75° on 30th, min. 46°·5 on 27th.—*St. Leonards.* Cloudy, with frequent R; temp. only twice exceeded 70°. Max. temp. 75°·2 on 30th, min. 51°·2 on 1st.—*Iford.* Wet and cold, except the last five days, which were very fine.—*St. Laurence.* Rainfall above the average; remarkable absence of T and L. Max. temp. 71°·2 on 30th, min. 49°·8 on 26th. —*Alton, Ashdell.* Max. temp. 73° on 31st, min. 46° on 27th.

III. *Buntingford, Throcking Rect.* Showery and unsettled, only 10 days without any fall; mean. temp. 58°·1; max. 75°·2 on 3rd; min. 41°·3 on 27th; T frequent between 7th and 12th, also on 24th, on which date there was also H.—*Winslow, Addington.* Owing to the frequent R, and great want of heat and sunshine, an unfavourable month for securing the very abundant hay crop, or for ripening the corn crops; a large flood on the 12th did immense damage to the hay, many hundred acres being covered with water, and quantities carried away; max. temp. 75° on 30th; min. 44° on 27th.—*Henley, Stonor Park.* A very unpleasant month, quite unable to get on with ground work owing to R, sun wanted very badly.—*Oxford, Magdalen Coll.* Max. temp. 71° on 3rd; min. 44° on 10th, 27th and 31st.—*Banbury, Wroxton.* Max. temp. 76° on 3rd, 29th and 30th; min. 44° on 31st.—*Northampton, Hazlewood Rd.* Rainfall ·42 in. above the average; hay much damaged by R and by delay in carrying; corn ripening rapidly in the latter part of the month.—*Cambridge, Beech Ho.* Max. temp. 72° on 3rd; min. 43° on 26th.

IV. *Southend.* Max. temp. 78°·9 on 3rd; min. 46°·5 on 1st.—*Harlow, Sheering Rectory.* Max. temp. 74° on 30th; min. 43° on 27th. —*Ipswich, Bishops Hill.* Rainfall slightly above the average; un-

settled with very variable temp., and many cold nights; a few oats and peas cut at the end of the month, but no wheat.—*Beccles, Ellough Rect.* Max. temp. 79° on 4th; min. 41° on 27th.—*Diss.* A wettish month, making a slow hay harvest; a large quantity of the heavy crop was, however, well secured; wheat and barley greatly improved in appearance. The month was a healthy one.—*Hindringham.* Max. temp. 79° on 3rd; min. 44° on 26th.

V. *Salisbury, Alderbury.* Max. temp. 79° on 2nd and 29th; min. 46° on 1st.—*Calne, Compton Bassett.* Showery and unsettled, with low temp. and several TSS. Max. temp. 75° on 2nd; min. 46° on 27th.—*Weymouth, Langton Herring.* Mean temp. 2°·5 below the average, range very small; weather most unfavourable for the later hay harvest, there were not four consecutive fine days. Max. temp. 72° on 28th; the lowest max. for July in 11 years; min. 49° on 26th and 31st.—*Beaminster.* In spite of the prevalence of R, there was a considerable amount of sunshine, and the month generally was warm and genial. —*Torquay, Babbacombe.* Cold, wet, and stormy, rainfall half as much again as the average; mean. temp. 58°·8, about 2° below the average; fine warm weather prevailed on the first 3 days, and from the 28th to 31st, the remainder of the month was generally cold, showery, and unsettled, and very unfavourable for securing the hay; S.W. winds prevailed on 21 days. Max. temp. 72°·7 on 31st; min. 47°·0 on 27th. —*Ashburton, Druid.* Max. temp. 74°·4 on 1st; min. 48°·7 on 28th. —*Teignmouth, Woodway.* Max. temp. 74°·8 on 31st; min. 47°·3 on 10th and 27th.—*Crewkerne, Bincombe House.* Cold, wet, and stormy, with S. to S.W. winds.

VI. *Clifton.* The wettest July for 30 years. Max. temp. 76°·3 on 2nd; min. 49°·0 on 10th.—*Newnham-on-Severn.* Very stormy, with 23 wet days.—*Cheltenham.* Very damp, very many rainy days, but with one exception, no heavy fall; T prevalent, but only one TS. Temp. below, and rainfall above, the average. Max. temp. 74°·9 on 2nd; min. 40°·4 on 31st.—*Ross, The Graig.* The wet cool weather which commenced on May 22nd, continued to July 23rd (63 days), out of which, 50 were wet, the R, however, fell often during the evening and night, and although the haymaking was much hindered, there were pleasant intervals of fine sunny weather; average max. temp. low, but about 3°·5 above that of July, 1879; average min. normal; absolute max. 78°·2 on 28th; min. 43°·7 on 31st.—*Wem, Sansaw Hall.* A disastrous month for farming, not so much from the amount of R as from its persistency and the absence of sunshine to

dry the ground and crops. Max. temp. 72° on 1st and 2nd; min. 42° on 10th.—*Cheadle.* Max. temp. 70° on 1st, 3rd, and 4th; min. 45° on 10th.

VII. *Melton, Coston Rectory.* Very showery, hindering hay harvest very much. Max. temp. 70°·5 on 3rd and 14th; min. 40°·0 on 27th. —*Stamford, Ketton Hall.* A genial month, with frequent showers. Max. temp. 75° on 30th; min. 40° on 27th.—*Nottingham, Strelley Hall.* A showery month, 26 wet days; however, the total rainfall was not much above the average. R fell every day from the 3rd to 24th. The weather was hindering for haymaking; that cut at the beginning of the month much damaged. The warmest month in the year, although the mean temp. (58°·7) was about 1° below average. The temp. only rose above 70° on 5 days. Sunshine deficient; on only one day was as much as 10 hours recorded. The last week finer and warmer than the rest of the month. T or TS every day from 6th to 11th inclusive.—*Worksop, Hodsock Priory.* Another dull and cold month, though not so cold as July, 1879; rainfall about the average; the temperature never rose above 72°·8; sunshine about the same as in June. Good hay crops, and harvested in very fair order; fair supply of strawberries and other fruit, but much was eaten by slugs.

VIII. *Macclesfield Park.* Rainfall 53 per cent. above the average. Max. temp. 68°·2 on 2nd; min. 45°·7 on 29th.

IX. *Wakefield, Stanley Vic.* Very unsettled weather prevailed from the 1st to 9th, the wind changing its direction from three to six times a day; the currents of air crossed and disturbed the electricity, the temp. was thereby lowered, the vapour condensed, and T showers fell daily. Max. temp. 75° on 3rd; min. 42° on 26th.—*Sedbergh.* Mean temp. 58°·3; max. 77° on 1st; min. 43° on 27th.—*Scarborough.* T on 9 days. Max. temp. 70°·8 on 14th; min. 49°·4 on 27th.—*East Layton* [*Darlington*]. A very wet month, considerably retarding agriculture. T occurred more or less almost every day during the whole month. Max. temp. 82° on 12th; min. 43° on 27th.—*Lune Head* [*Brough*]. Very unsettled weather for the most part, with much T.

X. *Haltwhistle Unthank Hall.* Max. temp. 68° on 2nd; min. 43° on 26th.—*Carlisle, St. James's Rd.* The closing days of June, and the first two days of July were beautifully fine, on the 3rd, however, R began to fall, and from that date to the close of the month the weather continued most unsettled; the amount of cloud was remarkable, not one morning or evening being absolutely clear. Under

these circumstances the hay harvest was slow and tedious, and much spoiled; corn crops, too, suffered owing to the absence of sun, and the superabundance of moisture. Max. temp. 76° on 13th and 15th; min. 35° on 14th; frost on grass on 1 day.—*Elterwater.* The wettest July since observations were commenced in 1868; max. temp. 72° on 25th; min. 44° on 8th.—*Shap.* Cold and wet, very trying for farmers; grass remarkably thick, but very little cut.

XI. *Llanfrechfa Grange.* Haymaking progressing during the latter part of the month, but much hay injured by continuous wet; max. temp. 75° on 2nd and 29th; min. 47° on 27th.—*Cardiff, Park Place.* Max. temp. 74°·0 on 28th; min. 46°·9 on 27th.—*Llandovery.* Exceedingly wet, the worst hay harvest remembered in this part of the country; max. temp. 77° on 2nd; min. 44° on 26th.—*Llechryd, Castle Malgwyn.* Remarkably wet, cold, and windy; R every day for 3 weeks.—*Builth, Abergwessin Vic.* Max. temp. 71° on 2nd; min. 45° on 26th.—*Carno, Tybrith.* Max. temp. 68° on 1st and 2nd; min. 38° on 31st.—*Menaifron.* A wet month; gale on 13th.

XII. *Dumfries, Crichton Inst.* Rainfall almost unprecedentedly large, only 5 dry days; mean temp. below the average; winds variable, but light, the most prevalent being S.W., S., and S.E.; TSS occurred on 3 days, but none of great severity; max. temp. 73°·5 on 1st; min. 43°·8 on 27th.—*Melrose, Abbey Gate.* Mean. temp. (56°·5), 5°·7 below, and rainfall ·43 in. above the average; hay, which was a heavy crop, sadly kept back. Max. temp. 76°·8 on 1st, min. 35°·2 on 27th.

XIII. *North Esk Res.* [*Penicuick*]. T frequent; max. temp. 71° on 2nd; min. 43°.

XIV. *Glasgow, Queen's Park.* Max. temp. 76° on 2nd and 12th, min. 44° on 26th.

XVIII. *Lochbroom.* Very rainy; remarkable for its frequent downpours of R, severe TSS also very frequent. Crops look magnificent, but will likely be late; grass plentiful, and stock in excellent condition.—*Tain, Springfield.* A great want of sunshine, the little there has been, was hot and brilliant.—*Loch Shiel, Glenaladale.* Wet, calm, and warm.

XIX. *Watten, H.R.S.* First half wet, but with high temp., latter part mild and very fine.

XX. *Fermoy, Glenville.* The wettest July on record.—*Tipperary, Henry St.* Very wet and rather cold until the 23rd, when the weather became fine and warm.—*Nenagh, Castle Lough.* Very wet, especially about the middle; nights of the 24th and 25th were very cold, with

indications of frost on grass.—*Newcastle West.* A bad month, the continuous showers giving it more the appearance of April than of July; hay-making almost suspended from 3rd to 24th.—*Kilrush.* Very wet, wild, and cold; harvesting much retarded; fevers prevalent.—*Miltown Malbay.* South-westerly winds (at times strong) prevalent, bringing with them plenty of moisture. The first 16 days were warm, giving a great impetus to vegetation, which the cold of June had kept backward, but from the 16th to the 26th cold, boisterous, showery weather prevailed; the last week was warm, with better promise. On the whole a bad month for the season; potatoes all blighted, mangolds and turnips perishing from constant wet and want of sun, and hay rotting.

XXI. *St. Mullins* [*Graigue*]. Max. temp. 68° on 3rd; min. 48° on 7th.—*Athlone, Twyford.* Max. temp. 74° on 3rd; min. 45° on 26th.

XXII. *Ballinasloe, Kilconnell.* The most gloomy, wet and miserable July experienced for many years.—*Ballinasloe.* Very wet and cold, with several TSS; the heaviest rainfall (6·38 in.) in any month since January, 1862, except January, 1873, and 3·40 in. above the average. Max. temp. 68° on 2nd and 3rd; min. 42° on 8th.

XXIII. *Rockcorry.* Rainfall (5·71 in.) the largest amount in July for 8 years.—*Seaforde.* Max. temp. 78° on 3rd; min. 46° on 25th.—*Belfast, New Barnsley.* A very trying month for farmers, most difficult to keep the hay from rotting in the fields; a great portion already spoiled; corn and potatoes look well.—*Ballymena.* R fell on every day in July, but on the 22nd the quantity did not amount to ·01 in.—*Bushmills.* The greatest rainfall on record, and more than double the average. Very unfavourable weather for the farmer; potato blight already common. Max. temp. 72° on 1st; min. 43° on 24th and 25th.—*Londonderry, Knockan.* The most persistently wet July remembered. Very little variation of temp.—*Stewartstown.* Rainfall far above the average, destroying crops of all kinds.—*Ramelton.* The heaviest rainfall in any month since October, 1878.—*Ramelton, Killygarvan.* A wet month, rainfall more than 2 in. above the average, but no high wind. Mean temp. 56°·4, 2°·5 below the average; max. 70° on 21st; min. 42° on 11th.—*Buncrana.* Very unsettled weather, rendering the making of hay costly and difficult; crops generally doing well, and grass abundant. Max. temp. 67° on 11th; min. 46° on 10th.

AUGUST.

I. *Hanworth.* Generally cold and windy from W., with very little sunshine.—*Muswell Hill.* Rainfall less than half the average, none to speak of falling during the first fortnight.—*Pinner Hill.* Max. temp. 75° on 7th; min. 48° on 4th.

II. *Croydon, Addiscombe.* Cold, dull, and windy. It was remarkable for the very slight amount of rain deposited during the daytime of the first three weeks, for the great steadiness of atmospheric pressure throughout the first 11 days, for a rather severe gale on 23rd, and for the prevalence of south-westerly winds; with the 14th ended a term of dry weather, which had lasted nearly three weeks, and during which only ·12 in. of rain fell.—*Dorking, Abinger Hall.* The first half of the month was very good for harvesting, though somewhat cool, N.E. and E. winds were prevalent; the latter half was showery and less bright, W. and N.W. winds prevailed.—*Hythe.* The first half very fine, the latter half dull and showery. Max. temp. 78° on 12th; min. 47°·5 on 30th.—*Littlehampton.* Unusually sunless and damp after the 12th. Crops got in fairly well, harvest rather above the average. Max. temp. 82° on 5th; min. 40° on 24th.—*Eastbourne.* Max. temp. 75°·9 on 6th; min. 46°·3 on 31st.—*St. Leonards.* The first part fine and dry, the latter part wet and windy. Max. temp. 76°·4 on 12th; min. 48°·8 on 4th.—*Iford.* Beautiful harvest weather for the first 11 days; TS on 12th, afterwards wet and cold.—*St. Lawrence.* Lovely summer weather till the TS on the 12th, after which the weather continued broken. Potatoes a better crop than for some years; max. temp. 75°·7 on 6th; min. 51°·0 on 28th.—*Alton, Ashdell.* Max. temp. 79° on 12th; min. 45° on 31st.

III. *Buntingford, Throcking Rect.* A dull month. Mean temp. 57°·9; max. 77°·6 on 6th and 12th; min. 44°·5 on 24th.—*Winslow, Addington.* First half very fine, but after the 15th unsettled and very hindering for farmers; a great want of sunshine and of heat for ripening the finer kinds of fruit. Max. temp. 78° on 6th and 12th; min. 41° on 9th and 31st.—*Henley, Stonor Park.* Early part very favourable, latter part very wet and bad for harvesting; some corn damaged.—*Oxford, Magdalen College.* Max. temp. 79° on 13th; min. 41° on 28th and 31st.—*Banbury, Wroxton.* Max. temp. 81° on 12th; min. 42° on 24th and 31st.—*Northampton.* Rainfall more than an inch below the average, but so distributed that hay and corn were much damaged.—*Cambridge, Beech Ho.* Max. temp. 73° on 6th and 12th; min. 45° on 15th.

IV. *Southend.* Max. temp. 82°·9 on 6th; min. 46°·4 on 31st.—*Harlow, Sheering.* Max. temp. 76° on 6th; min. 43° on 31st.—*Ipswich, Bishop's Hill.* Rainfall rather below the average.—*Beccles, Ellough Rectory.* Max. temp. 76° on 3rd; min. 40° on 31st.—*Diss.* The month opened with a showery day, but from the 2nd to the 14th it was fine and very favourable for harvest, the more active farmers securing a large and excellent crop of barley and wheat in fine condition; after 3 days partial break it was again fine till the 19th inclusive, R then set in and continued daily till the end of the month.—*Hindringham.* Max. temp. 82° on 18th; min. 45° on 15th.

V. *Calne, Compton Bassett.* Weather very fine, bright and dry till the 12th, then showery with low temp. at night. Max. temp. 78° on 12th; min. 43° on 28th.—*Weymouth, Langton Herring.* The month began with very fine weather, but from the 11th to 31st it was unsettled. Mean temp. 1°·6 below the average; max. 73° on 7th; min. 50° on 28th.—*Torquay, Babbacombe.* Variable, warm and fine till the 12th, showery and unsettled afterwards; rainfall below the average; no R was measured in the 18 days ending the 12th, this being the longest dry period since October, 1877; temp. about the average; max. in the shade 78°·2 on 6th, and in sun 139°·8, the highest observed in August. Min. temp. 47°·9 on 24th. Westerly winds prevailed on 14 days.—*Teignmouth, Woodway.* Max. temp. 81°·2 on 6th; min. 46°·8 on 24th.

VI. *Clifton.* Max. temp. 83°·3 on 12th; min. 44°·6 on 28th.—*Newnham-on-Severn.* First 12 days hot, remainder of month stormy.—*Cheltenham.* The month opened fine, bright, and warm, at times disagreeably close, especially on the 9th and 10th, when T was heard; after the 12th, the weather broke and continued more or less unsettled till the end of the month. Max. temp. 78°·1 on 6th; min. 40°·0 on 28th.—*Ross, The Graig.* Fine till the 12th, from 6th to 9th very hot; from 12th to 31st nearly constant R, but chiefly at night, and there were frequent fine and windy intervals by day, so that the harvest though hindered, was not materially damaged; temp. below the average. Max. 84°·1 on 6th; min. 43°·2 on 28th.—*Wem, Sansaw.* A disastrous month for the corn harvest. Max. temp. 79° on 6th; min. 42° on 23rd.—*Cheadle.* Max. temp. 73°·9 on 12th; min. 44°·0 on 24th.—*Coventry, Coundon.* Max. temp. 77° on 12th; min. 46° on 30th.

VII. *Melton, Coston Rectory.* First half fine, and harvest prospects promising, but the continued R of the latter half made matters look

serious again, though high winds tended to dry the corn. Max. temp. 75° on 12th; min. 39°·8 on 11th and 16th. —*Stamford, Ketton Hall.* The first part was very fine, but after the 14th the weather was very unsettled. Max. temp. 79° on 6th and 13th; min. 42° on 15th. —*Nottingham, Strelley Hall.* The driest month during the year, the fall being 1·5 in. below average. No rain fell till the 13th. From 13th to end of month, R fell every day but two, though there were no large falls. The mean temp. of the month was about 1°·5 below the average; the 4th week being 5° below the mean.—*Worksop, Hodsock Priory.* Fine, dry and pleasant, but not hot, weather up to the 12th, the rest of the month cool and showery, and stormy from the 21st to 23rd; the max. temp. in the year occurred on the 6th, but was only 76°. Rainfall less than in any August since 1876; sunshine 40 per cent. of the possible duration. Harvest began about the 9th, and though rather checked by the stormy weather in the third week, was getting on pretty well at the end of the month, the crops being very fair; great quantities of grass.

VIII. *Macclesfield Park.* Rainfall slightly above the average; max. temp. 73°·6 on 12th; min. 45°·1 on 24th.—*Knutsford.* Max. temp. 75°·5 on 12th; min. 45°·8 on 24th.—*Liverpool, Walton-on-the-Hill.* The weather generally was unsettled, with little sunshine; max. temp. 77° on 13th; min. 46° on 22nd.

IX. *Wakefield, Stanley Vic.* Max.temp. 73° on 11th; min. 43° on 15th.—*Sedbergh.* Mean temp. 58°·5; max. 77° on 9th; min. 44° on 31st.—*Scarborough.* Max. temp. 74°·7 on 11th; min. 47°·7 on 16th. —*East Layton* [*Darlington*]. Max. temp. 82° on 11th; min. 42° on 24th.—*Lune Head* [*Brough*]. Very fine in the first part of the month, showery afterwards.—*Whorlton* [*Darlington*] Very fine and warm for the first fortnight, then wet and often cold; hay well got in; harvest very promising.

X. *Haltwhistle, Unthank Hall.* Max. temp. 72° on 11th; min. 42° on 15th and 30th.—*Carlisle, St. James's Road.* Beautiful summer weather prevailed during the early part of the month; and no R fell for eleven days, but from the 14th it was very unsettled, R frequent and heavy, with an unusually large amount of cloud; harvest in consequence much retarded; max. temp. 76°·0 on 13th; min. 38°·2 on 31st.—*Elterwater, Woodlands.* A cold August; max. temp. 73° on 9th; min. 38° on 31st.

XI. *Llanfrechfa Grange.* Hay harvest not finished at the close of the month; max. temp. 79° on 6th; min. 45° on 28th.—*Cardiff, Park*

Place. Max. temp. 76°·3 on 12th; min. 46°·7 on 28th.—*Llandovery.* Beautiful weather for the first 12 days, and a great quantity of late hay gathered in good condition; the rest of the month wet and cold; max. temp. 79° on 12th; min. 44° on 27th.—*Llechryd, Castle Malgwyn.* A little fine weather at the beginning of the month was the only summer weather during the year.—*Builth, Abergwessin Vic.* Max. temp. 79° on 8th; min. 45° on 24th and 28th.—*Carno, Tybrith.* Max. temp. 72° on 9th; min. 41° on 11th and 12th.—*Douglas, Victoria Road.* The period from 5th to 11th, both inclusive, may be said to comprise the only summer days of 1882; the latter half of the month was remarkable for abnormally high winds—*Menaifron.* Fair and warm up to 13th, when a heavy TS occurred, after which the weather was unsettled; winds generally light.

XII. *Dumfries, Crichton Inst.* The rainfall of August was small, although 14 days were more or less showery; half of the entire quantity fell on the 22nd. The first part of the month was dry and fine, but the latter half was very broken; no violent storms, T on only one occasion; pressure and mean temp. about the average. Max. temp. 74°·4 on 11th, min. 42°·4 on 23rd.—*Melrose, Abbey Gate.* Mean temp. (55°·2), 1°·3, and rainfall 1·84 in. below the average, S. and W. winds prevalent. Max. temp. 85° on 10th, min. 32°·9 on 25th.

XIII. *North Esk Res.* [*Penicuick*]. Max temp. 76° on 10th; min. 40° on 31st.

XIV. *Glasgow, Queen's Park.* Max. temp. 81° on 9th; min. 40° on 31st.

XVIII. *Lochbroom.* A disastrous month for the hay crop; very cold throughout; crops late, and much beaten down by R and wind; potatoes much diseased.—*Loch Shiel, Glenaladale.* Very hot and fine from 2nd to 12th, but generally calm, cloudy and wet; very unfavourable harvest weather.

XIX. *Watten, H.R.S.* Mild and fine, but with little sun; the TSS of the 13th and 14th were exceptionally violent.

XX. *Tipperary, Henry St.* Very fine during the first half of the month, remainder variable.—*Nenagh, Castle Lough.* The first part of the month was very fine, raising hopes of a favourable harvest, but on the 13th a TS occurred, and the remainder of the month was changeable, with generally a rather low temp.—*Newcastle West.* Though the rainfall was heavy, farmers were able to secure the greater part of the hay crop, and the crops generally appear likely

to yield a fair average.—*Miltown Malbay.*—The early part dry and warm, including a week of very sultry weather, the only hot period during the summer; the latter part cold, boisterous, and rainy.

XXI. *St. Mullins*[*Graigue*]. Max. temp. 72°·5 on 10th; min. 45°·0 on 16th.—*Athlone, Twyford.* Max. temp. 74° on 10th; min. 45° on 17th.

XXII. *Ballinasloe, Kilconnell Rectory.* The latter half of the month was most inclement and wet.—*Ballinasloe.* The first part fine and bright with warm sun, but after a violent TS on 12th the weather became very cold and wet, with stormy winds. Max. temp. 73° on 10th; min. 45° on 23rd. Rainfall ·48 in. below average.

XXIII. *Seaforde.* Max. temp. 78° on 9th; min. 43° on 30th.—*Belfast, New Barnsley.* Fine hot weather till the 12th, afterwards unsettled and showery, with an occasional fine day; very difficult for farmers to secure the hay in good condition.—*Bushmills.* Max. temp. 86° on 10th; min. 38° on 30th.—*Ramelton, Killygarvan.* Rather wet, although the rainfall was not more than 0·75 in. above the average; a few days of warm weather in the early part. Mean temp. 56°, or 3° below the average; max. 80° on 10th; min. 40° on 31st.—*Buncrana.* Max. temp. 76° on 10th; min. 46° on 30th.

SEPTEMBER.

I. *Muswell Hill.* Rainfall rather above the average.—*Pinner Hill.* Max. temp. 67° on 2nd; min. 40° on 14th and 27th.

II. *Dorking, Abinger Hall.* A very favourable month for the harvest, corn in better condition than was expected; frosts about the middle of the month, but little damage done.—*Reigate, Holmfels.* Max. temp. 68° on 2nd and 3rd; min. 30° on 15th.—*Croydon, Addiscombe.* Exceptionally and continuously cold and dull.—*Hythe.* Mild and rainy. Max. temp. 69° on 2nd, 5th and 10th; min. 41°·5 on 14th.—*Eastbourne.* Max. temp. 69°·1 on 10th; min. 37°·0 on 15th.—*St. Leonards.* An average month. Max. temp. 67°·5 on 9th and 17th; min. 44°·3 on 28th.—*St. Lawrence Rectory.* Max. temp. 68°·3 on 10th; min. 43°·0 on 13th.—*Alton, Ashdell.* Max. temp. 67° on 3rd, 10th and 11th; min. 34° on 15th.

III. *Buntingford, Throcking Rec.* Mean temp. 52°·8; max. 67°·2 on 2nd; min. 39°·4 on 15th.—*Addington.* Many very fine days; nights frequently cold, and frost on grass on three occasions.

Max. temp. 67°; min. 33°.—*Henley, Stonor Park.* A fairly favourable month, harvest work satisfactorily completed, root crops look well, apples a short crop.—*Oxford, Magdalen Coll.* Max. temp. 69° on 3rd; min. 35° on 16th.—*Banbury, Wroxton.* Max. temp. 68° on 2nd and 9th; min. 36° on 15th.—*Northampton.* Rainfall much above the average. Max. temp. 65° on 5th; min. 40° on 16th.—*Cambridge, Beech Ho.* Max. temp. 66° on 2nd; min. 38° on 14th and 15th.

IV. *Southend.* Max. temp. 76°·0 on 17th; min. 40°·2 on 15th.—*Harlow, Sheering Rectory.* Rainfall about the average; max. temp. 69° on 3rd; min. 35° on 15th.—*Ipswich, Bishop's Hill.* Rainfall ·63 in. above the average; temp. unusually low.—*Beccles, Ellough Rectory.* Max. temp. 75° on 6th; min. 35° on 14th. *Diss.* Frequent rains impeded the later harvest operations, and the heavy falls on the 11th and 12th caused serious delay, many farmers, however, secured their large crops before the unfavourable weather set it, roots look well, garden produce is abundant.—*Hindringham.* Max. temp. 72° on 11th; min. 39° on 14th.

V. *Calne, Compton Bassett.* The first 4 days were showery followed by very fine and bright weather till the 17th, from thence to the end, several heavy showers of R fell. Max. temp. 66° on 2nd; min. 34° on 14th; frost on grass on 7 days.—*Langton Herring.* The coldest September for the last 11 years; mean. temp. 3°·9 below the average. Max. 65° on 2nd, 4th, and 9th; min. 40° on 13th.—*Torquay, Babbacombe.* Cold and rather wet, the first frost (on grass) of the season occurred on the 12th. N.W. winds prevailed on 9 days, N.E. on 8 days, S.W. on 6 days. Max. temp. 66°·9 on 3rd; min. 36°·9 on 14th; frost on grass on 4 days.—*Ashburton, Druid.* Max. temp. 69°·5 on 8th; min. 39°·5 on 14th.—*Teignmouth.* Max. temp. 70°·4 on 4th; min. 41°·8 on 16th.

VI. *Clifton, S. Parade.* Max. temp. 67°·5 on 3rd; min. 37°·0 on 14th.—*Newnham-on-Severn.* Fourteen dry days in middle of month.—*Cheltenham.* The atmospheric pressure varied considerably during the month, anticyclones were prevalent at the commencement, but great and frequent disturbances at the close; temp. 2° below the average of 5 years, rainfall slightly above it. Max. temp. 67°·4 on 1st; min. 34° on 16th.—*Ross, The Graig.* After the first few days, which were rainy, very fine weather prevailed till the 19th, thence to the end gloomy and wet; harvest only just completed at the close after a very hindering time. Rainfall about the average, but number of wet days considerably in excess; temp. very low for the season. Max.

67° on 2nd; min. 32°·8 on 14th. Particularly cold from 12th to 16th.—*Wem, Sansaw.* Max. temp. 65°·5 on 1st; min. 31°·0 on 16th; frost on grass on 11 days.—*Cheadle, Heath Ho.* Max. temp. 64°·2 on 8th; min. 38°·9 on 15th.—*Coventry, Coundon.* Max. temp. 68° on 3rd; min. 38° on 14th and 15th.

VII. *Melton, Coston Rectory.* An average month in every respect; the harvest, in spite of occasional hindrances, was, on the whole, well got in; several cold nights with frost on the ground; great rise of temp. on 30th. Max. temp. 67°·0 on 30th; min. 32°·3 on 15th.—*Stamford, Ketton Hall.* Max. temp. 71° on 17th; min. 31° on 15th; frost on 2 days. —*Nottingham, Strelley Hall.*—The first 5 days wet; little R from 5th to 26th, by which time most of the harvest was secured in moderate order; temp. 2° below average, very cold from 5th to 19th.—*Worksop, Hodsock Priory.* Temp. very low, especially at night; pressure low and variable; rainfall rather below the average; wind variable and light; the first few days warm and showery, but the rest pretty uniformly cold. The mean temp. (53°) is the lowest for September since 1877, and both the max. (67°·2) and the min. (31°·2) are unusually low. Sunshine, though only 29 per cent. of the possible duration, is more than in 1881. Harvest mostly finished on the light land by the end of the month in very fair order; turnips good, apples and pears very scarce.

VIII. *Macclesfield Park.* A very fine month. Max. temp. 64°·9 on 7th; min. 35°·7 on 12th.—*Liverpool, Walton-on-the-Hill.* Fine especially during the middle of the month, the last week being rather wet; rainfall below the average. Max. temp. 67° on 1st; min. 38° on 14th.

IX. *Wakefield, Stanley Vic.* After the first few days the weather was most suitable for the harvest, which was brought to a close on 19th, with excellent prospects of a good yield. Max. temp. 72° on 22nd; min. 34° on 15th.—*Sedbergh.* Mean temp. 53°·1; max. 66° on 9th; min. 39° on 12th.—*Scarborough.* Fine; mean temp. just average, rainfall 2·09 in. below it; max. 66°·6 on 2nd; min. 43°·7 on 15th. —*East Layton* [*Darlington.*] During the first part of the month harvest operations went on briskly, but later on the weather materially delayed the in-gathering of the grain. Max. temp. 74° on 6th; min. 36° on 21st.

X. *Barnard Castle, Whorlton.* Warm, with frequent heavy R. Max. temp. 65° on 11th.; min 33° on 16th.—*Unthank Hall.* Max. temp. 61° on 1st; min. 34° on 11th.—*Carlisle, St. James Road.* Weather on

the whole favourable for harvest operations; all the corn cut, and most of it secured in excellent condition; temp. remarkably low towards the close of the month. Max. temp. 68°·9 on 9th; min. 34°·3 on 30th.—*Elterwater, Woodlands.* A fine September, with rainfall below the average. Max. temp. 64° on 7th and 9th; min. 37° on 13th, 19th, and 30th.

XI. *Llanfrechfa Grange.* The total R was not much above the average, but the number of rainy days was unusually great, making it a very damp month, and retarding the harvest. Max. temp. 66° on 3rd and 4th; min. 36° on 13th.—*Llandovery.* A fine harvest month, and very seasonable for the hill farmer; in the low lands the wheat sprouted, owing to the continual R of August. Max. temp. 66° on 1st; min. 35° on 12th and 13th.—*Llechryd, Castle Malgwyn.* Wet and cold, so much so that in this neighbourhood hardly any corn was carried.—*Abergwessin Vic.* Max. temp. 66° on 22nd; min. 34° on 12th and 13th.—*Carno Tybrith.* Max. temp. 60° on 1st and 8th; min. 29° on 13th; frost on four days.—*Menaifron.* Wet periods at the beginning, middle, and end of the month, but a fine month on the whole.

XII. *Dumfries, Crichton Inst.* A mild and calm, but rather showery month; mean temp. rather below the average, mean pressure low, but no storms recorded. Max. temp. 67°·7 on 4th; min. 32° on 1st. —*Melrose, Abbey Gate.* Mean temp. 2°, and rainfall ·72 in. below the average; though there were no heavy falls of R, the frequent showers (R falling on 21 days) hindered the harvest; most of the cereals were, however, secured in good condition by the end of the month. Max. temp. 66°·7 on 8th.

XIII. *North Esk Res.* Max. temp. 64° on 8th; min. 32° on 30th.

XIV. *Glasgow, Queen's Park.* Max. temp. 74° on 8th; min. 35° on 12th.

XVI. *St Andrews, Newton Bank.* Max. temp. 69° on 6th; min. 31° on 11th.

XVIII. *Lochbroom.* Very unfavourable for the farmer; much corn uncut at the close, and some unripe; much of what was cut remained for weeks on the fields, and was spoilt by the wet.—*Glenaladale.* Mild, calm, and wet; very bad harvest weather.

XIX. *Watten, H.R.S.* First week good harvest weather; rest of the month generally wet and dull, without sun or wind; unfavourable for harvest.

XX. *Nenagh, Castle Lough.* A fine and very favourable month for

harvest operations.—*Newcastle West.* A fair harvest month, but too variable to be considered a good one.—*Miltown Malbay.* Warm and fair, though rather changeable and cold for about a week in the middle.

XXI. *Athlone, Twyford.* Max. temp. 67° on 1st, 2nd, and 9th; min. 38°.

XXIII. *Seaforde.* Max. temp. 67° on 1st and 2nd; min. 33° on 29th; frost on grass on three days.—*Belfast, New Barnsley.* Although the rainfall of the month was excessive, the corn crops were not damaged, and nearly all of them were gathered in good condition before the end of the month; potatoes suffered from the wet of August, but not materially.—*Bushmills.* Very unfavourable for harvest. Max. temp. 70° on 1st; min. 31° on 12th.—*Ramelton, Killygarvan.* September was not a bad month, although the rainfall was an inch above, and the temp. 3° below the average, the days were generally fine and bright. Mean temp. 51°; max. 67° on 1st; min. 33° on 29th.—*Buncrana.* Max. temp. 70° on 8th and 20th; min. 38° on 28th and 29th.

OCTOBER.

I. *Hampton Wick.* Rainfall and number of wet days excessive.—*Notting Hill, Lansdowne Crescent.* On 5 days during the month, the rainfall exceeded ·50 in., and in the week ending 21st, 2·20 in. fell.—*Muswell Hill.* Rainfall nearly double the average, and the largest in October since 1872; when 5·80 in. fell; the fall was heaviest in the latter part of the month for only ·81 in. fell in the first 14 days.—*Pinner Hill.* Max. temp. 66° on 1st; min. 33° on 29th.

II. *Dorking, Abinger Hall.* Very wet and stormy, especially the latter part, floods frequent in many places, all kinds of ground work much in arrear.—*Reigate, Holmfels.* Rain fell on 24 days, and was generally accompanied by boisterous winds; several large elm trees torn up. Max. temp. 67° on 1st; min. 26° on 30th; frost in air on 5 days, on grass on 19 days.—*Croydon, Addiscombe.* Rather warm, and most exceptionally wet and very dull. Rather more than 3 in. of R fell during the 10 days ending the 28th.—*Hythe.* Very wet and stormy. Max. temp. 69° on 1st; min. 35° on 29th.—*Littlehampton.*

Temp. above the average, wind and R the heaviest on record. Max. temp. 62° on 2nd, 3rd, and 9th; min. 29° on 30th.—*Worthing.* The wettest month since October, 1865; on the night of the 15th–16th. 2·11 in. of R fell in about 12 hours, and ·91 in. more fell in the succeeding 24 hours. —*Chichester, Eartham House.* By far the wettest month since observations were commenced in 1871.—*Eastbourne.* Max. temp. 66°·5 on 1st; min. 44°·0 on 30th.—*Brighton, Hove Town.* The largest amount of rainfall recorded as having fallen in Brighton in one month during 60 years; on the 15th and 16th, 3·00 in. fell. and from 20th to 22nd, 2·35 in.—*St. Leonards.* Very wet and stormy, with frequent T and L. Max. temp. 65°·0 on 1st; min. 40°·7 on 30th. —*Hailsham.* The largest fall of R recorded in any month during 10 years.—*Lewes, Glynde Place.* Very wet, on 4 days the fall of R exceeded 1 in.—*St. Lawrence.* Decidedly wet. Max. temp. 66°·4 on 1st; min. 39° on 30th.—*Alton, Ashdell.* Max. temp. 67° on 1st; min. 30° on 26th; frost on grass on 4 days.

III.—*Buntingford, Throcking Rect.* The wettest October since 1865, rain fell every day except on 3rd, from 7th to 9th, on 14th, and 25th. Mean temp. 48°·5; Max. temp. 66°·7 on 1st; min. 29°·4 on 26th.—*Winslow, Addington.* Wet; R more or less on 27 days, and three destructive floods; the rainfall of this month has only been exceeded twice during the last 12 years, viz., in October, 1875, and in July, 1880. Max. temp. 67° on 1st; min. 28° on 26th; frost on 3 days.—*Henley, Stonor Park.* Very wet and miserable, scarcely any wheat sown, and floods out in the low lands.—*Oxford, Magdalen Coll.* Wet, work at Magdalen Bridge suspended in consequence of the rising of the Cherwell, portions of the Botanic Garden under water. Max. temp. 67° on 2nd; min. 33° on 26th.—*Banbury, Wroxton.* A disastrous month; land too wet for ploughing; max. temp. 66° on 1st and 2nd; min. 28° on 26th.—*Northampton.* Very wet, much damage done by floods in the town and neighbourhood; max. temp. 63° on 1st; min. 35° on 25th.—*Cambridge, Beech House.* Max. temp. 65° on 1st; min. 32° on 25th.

IV. *Southend.* Max. temp. 70°·7 on 2nd; min. 36°·5 on 26th.—*Harlow, Sheering Rect.* The most rainy October since 1865, 2·38 in. above the average. Max. temp. 68° on 1st; min. 29° on 26th; frost on grass on 4 days.—*Ipswich, Bishops Hill.* The latter half of the month was very wet, nearly 4 in. of R falling in 15 days, and the total is 1·73 in. above the average.—*Rendlesham Hall.* The wettest October known for many years.—*Diss.* Very stormy and wet, with

the heaviest rainfall since the record was commenced in September, 1870. On three occasions an inch or upwards fell in 24 hours, and the floods on the lower lands, particularly after the downfall of 27th and 28th, were very disastrous; all farming operations at a standstill.—*Beccles, Ellough Rectory.* Only 8 days without R; ploughing operations, which at the beginning of the month were forward, were quite stopped by the heavy R; an almost unprecedented flood on the Beccles marshes at the end of the month. Max. temp. 63° on 2nd; min. 29° on 26th.

V. *Calne, Compton Bassett.* Rough, wet, and squally. Max. temp. 67° on 1st; min. 32° on 26th; frost on grass on 7 days.—*Weymouth, Langton Herring.* The rainfall of the month was greater than that of any month since November, 1877, and there were only 4 dry days. Mean temp. 1°·3 above the average; max. 66° on 1st; min. 38° on 24th, 29th, and 30th.—*Torquay, Babbacombe.* Very wet and rather cold; rainfall more than 50 per cent. above the average; the wettest month since October, 1880; R fell daily from the 14th to the 27th, and there were only 5 dry days; temp. slightly below the average; max. 65°·7 on 1st; min. 34°·3 on 26th; S.W. winds prevailed on 13 days, and N.E. on 8.—*Ashburton, Druid.* Max. temp. 65°·5 on 1st; min. 36°·5 on 24th.—*Teignmouth.* Max. temp. 66°·9 on 4th; min. 37°·6 on 24th.

VI.—*Clifton.* Max. temp. 69°·7 on 1st; min. 31°·7 on 26th; frost in air on 1 day, on grass on 6 days.—*Cheltenham.* Very wet, with tempestuous weather at the close; mean temp. rather above the average; max. 67°·0 on 1st; min. 30°·5 on 26th; frost on grass on 6 days.—*Ross, The Graig.* Almost constant R throughout the month, total fall having only once been exceeded in October during 64 years, viz., in 1843. Max. temp. 65°·8 on 1st; min. 29°·6 on 26th; frost in air on 2 days, on grass on 6 days.—*Wem, Sansaw.* Max. temp. 66° on 1st; min. 29° on 26th; frost in air on 2 days, on grass on 11 days.—*Cheadle.* Max. temp. 64°·2 on 1st; min. 27°·9 on 26th; frost in air on 1 day, on grass on 6 days.—*Coventry, Coundon.* Max. temp. 66° on 1st; min. 30° on 25th; frost on 2 days.

VII. *Melton, Coston Rect.* Rainfall much above the average, though not greater than that of October 1875, or October 1880; temp. mild, very few frosts and only one severe; max. temp. 67°·0 on 1st; min. 27°·3 on 26th.—*Stamford, Ketton Hall.* With the exception of the first week, which was fine, the month was wet and stormy; max. temp. 70° on 1st; min. 27° on 26th; frost on 4 days.—*Horncastle,*

Bucknall. Max. temp. 70° on 1st; min. 32° on 26th.—*Nottingham, Strelley Hall.* Very wet, damp and sunless; rainfall (5·36 in.) about 2·4 in. above average, and only 19 per cent. of possible duration of sunshine was recorded. From 10th of this month to 9th November, 6·68 in. R fell; during this period there were only 2 days without R. This weather entirely spoilt any late corn, and prevented beans being got in till the middle of November.—*Worksop, Hodsock Priory.* Mild, especially at night, dull and very wet; warm up to the 21st, but the last 10 days cold; the first 10 days were only showery, but the rest of the month was uniformly wet, and the total fall, though much less than that of October 1880, was nearly double the average. Sunshine only 23 per cent. of the possible duration, or an hour a day less than in October 1881. The wet interfered with farm work on heavy land, but a good deal of wheat was sown on the sand; high floods after the heavy R on the 24th.

VIII. *Macclesfield Park.* The latter part of the month was very wet and windy, but the rainfall of the month was rather below the average; mean temp. 1°·7 above the average; max. 66°·1 on 1st; min. 30°·9 on 29th.—*Liverpool, Walton-on-the-Hill.* Unsettled and fairly warm, the temp. falling to 32° on only two occasions. Max. temp. 68° on 1st; min. 31° on 25th.

IX. *Wakefield, Stanley Vic.* Max. temp. 67° on 1st; min. 29° on 25th; frost on two days.—*Sedbergh.* Mean temp. 49°·6; max. 64° on 1st; min. 32° on 25th.—*Scarborough.* Rainfall 1·54 in. above the average. Mean temp. 50°·8, 2°·3 above the average; max. 67°·3 on 1st; min. 36°·9 on 26th.—*East Layton Hall* [*Darlington*]. Remarkable for the almost unpreceented number of wet days, the falls not being great, but almost constant; the ground was completely saturated with water; grass on pastures very plentiful, turnip crop heavy. Max. temp. 63° on 2nd and 4th; min. 30° on 26th; frost on two days.—*Lune Head* [*Brough*]. Very cold and wet.

X. *Whorlton.* Wet and warm with very little wind. Max. temp. 65° on 14th; min. 30° on 26th.—*Unthank Hall.* Max. temp. 62° on 1st; min. 29° on 26th; frost on 2 days.—*Elterwater, Woodlands.* Max. temp. 65° on 1st; min. 31° on 26th; frost on grass on 5 days.—*Carlisle, St. James' Road.* The month opened with a high temp.; the ther. at 9 a.m. on the 1st reading 17°·5 higher than on the previous day. S.E. winds, with overcast skies and dull, gloomy weather prevalent. R was frequent, and the total amount large. Max. temp. 68°·0

on 1st; min. 30°·1 on 26th; frost in air on 2 days, on grass on 9 days.

XI. *Llanfrechfa Grange.* Amount of R unusual; max. temp. 63° on 2nd; min. 32° on 24th and 27th.—*Llandovery.* Very wet; bad for wheat sowing; max. temp. 68° on 1st; min. 31° on 25th.—*Llechryd, Castle Malgwyn.* Very mild and wet, but though the R was continual we have escaped the floods so prevalent in England.—*Builth, Abergwessin Vic.* Max. temp. 63° on 1st; min. 32° on 25th.—*Carno, Tybrith.* Max. temp. 62° on 1st; min. 25° on 26th; frost on 4 days.—*Rhayader, Nantgwillt.* R frequent but not heavy, total 1·47 in. below the average.—*Menaifron.* Only 7 days without R; H on 22nd; S. gale on 19th.—*Douglas, Victoria Road.* The first 3 days were stormy, followed by mild autumn weather until the 13th, from the 14th to the end, almost one continued downpour, and a succession of very heavy W.S.W. to W.N.W. gales.

XII. *Dumfries, Crichton Inst.* Generally cloudy, damp, and disagreeable. Rainfall heavy, but not much above the average; almost a total absence of storms; little sunshine and few frosty mornings. Max. temp. 61°·7 on 13th; min. 25°·8 on 26th; frost on 3 days.—*Melrose.* Mean temp. 44°, or 5° above the average; rainfall slightly below it, potatoes and turnips a good crop. Max. temp. 69° on 1st.

XIII. *North Esk Res.* Max. temp. 63° on 1st; min. 27° on 26th.

XIV. *Glasgow, Queen's Park.* Max. temp. 66° on 1st; min. 28° on 29th; frost on 3 days.

XVI. *St. Andrew's, Newton Bank.* Max. temp. 66° on 1st; min. 27° on 25th; frost on 4 days.

XVIII. *Lochbroom.* A most beautiful month, the finest of the year.—*Glenaladale, Loch Shiel.* A fine month on the whole, but damp with little sun, and, with the exception of two days, remarkably calm, the wind almost throughout the month had a touch of E. in it, prevailing direction S.S.E.; mild up to the last week, when the temp. fell.—*Aviemore H.R.S.* Exceptionally fine and mild.

XX. *Nenagh, Castle Lough.* After a great storm on the 1st the weather for about 10 days was favourable, but the rest of month wet.—*Newcastle West.* The month was one of strong winds and heavy rains, disastrous to late farming.—*Miltown Malbay.* Furious hurricane on the 1st; the rest of the month (with the exception of one week, which was cold, with H showers) was mild, warm, and rainy.

XXI. *Athlone, Twyford.* Max. temp. 69° on 1st; min. 31° on 26th; frost in air on two days, on grass on seven days.

XXIII. *Seaforde.* Max. temp. 66° on 3rd; min. 29° on 24th; frost in air on five days, on grass on 10 days.—*Belfast, New Barnsley.* A fine open month; late corn suffered from the high wind at the beginning of the month; most of the R fell at night; not much frost.—*Bushmills.* Max. temp. 65° on 3rd; min. 27° on 28th; frost on four days.—*Ramelton, Killygarvan.* October commenced with a very violent gale on the 1st, the month otherwise was good. Rainfall 1·30 in., and temp. 1°·5, below the average; max. temp. 62° on 1st and 8th; min. 26° on 26th and 29th; frost in air on six days, on grass on eight days.—*Buncrana.* Max. temp. 67° on 12th; min. 32° on 28th.

NOVEMBER.

I. *Muswell Hill.* Rainfall about 13 per cent. above the average, number of rainy days unusually large.—*Pinner Hill.* Max. temp. 59° on 5th; min. 26° on 17th; frost on 9 days.

II. *Croydon, Addiscombe.* Warm, dry and bright month, remarkable for continual changes in atmospheric pressure, for prevalence of S.W. winds, and great freedom from fogs.—*Hythe.* Dull and showery, very unfavourable for farm work. Max. temp. 62° on 23rd; min. 29° on 30th; frost on 5 days. — *Eastbourne.* Max. temp. 59°·0 on 5th; min. 26°·3 on 18th; frost in air on 2 days, on grass on 7 days.—*St. Leonards.* Mild at the commencement, but cold at the end; R frequent. Max. temp. 57°·6 on 4th; min. 31°·3 on 18th; frost on grass on 14 days.—*St. Lawrence.* Rainfall slightly above the average; its frequency interfered greatly with farming. Max. temp. 59°·0 on 1st; min. 32°·5 on 15th; frost on grass on 6 days.—*Ashdell, Alton.* Max. temp. 58° on 5th; min. 23° on 18th; frost in air on 5 days, on grass on 16 days.

III. *Buntingford, Throcking Rect.* R fell on 22 days; mean. temp. 40°·9; max. 57°·4, on 5th; min. 26°·9 on 18th; strong wind and high temp. prevailed during the first few days.—*Winslow, Addington.* Very unsettled, rainfall much above the average, and the greatest recorded in November during 12 years; bar. very unsteady, and often very low; max. temp. 60° on 5th; min. 19° on 18th; frost in air on 7 days, on grass on 17 days.—*Oxford, Magdalen Coll.* Max. temp. 60° on 6th; min. 24° on 18th; frost in air on 6 days, on grass on 18 days.—*Banbury, Wroxton.* Max. temp. 59° on 5th; min. 19°

on 18th; frost on 12 days.—*Northampton.* Rainfall (3·40 in.) ·07 in. above the average; max. temp. 57° on 5th; min. 24° on 17th; frost on 9 days.—*Cambridge, Beech Ho.* Max. temp. 57° on 5th; min. 24° on 17th; frost on 8 days.

IV. *Southend.* Max. temp. 62°·1 on 1st; min. 27°·8 on 18th; frost on 3 days.—*Harlow, Sheering Rect.* Rainfall 1·29 in. above the average; max. temp. 59° on 5th; min. 22° on 18th; frost in air on 5 days, on grass on 12 days.—*Ipswich, Bishops Hill.* Wet and windy, rainfall slightly above the average.—*Beccles, Ellough Rect.* Max. temp. 54° on 6th; min. 25° on 18th; frost on 17 days.—*Diss.* A windy, wet month, with almost continuous gales from 1st to 11th. R fell on 19 days, and the country was much flooded. Young crops looking sickly; garden produce good.

V. *Salisbury, Alderbury.* Max. temp. 64° on 6th; min. 29° on 30th; frost on 6 days.—*Calne, Compton Bassett.* Wet, stormy, and cold, only 7 days being dry; max. temp. 60° on 6th; min. 25° on 18th; frost in air on 4 days, on grass on 20 days.—*Weymouth, Langton Herring.* Wet, some R falling on no fewer than 27 days; from 1st to 10th the temp. was high and gales were frequent; mean temp. about the average; max. 59° on 5th; min. 29° on 18th; range of pressure remarkably small.—*Torquay, Babbacombe.* Wet and stormy, with continual variations of temp. and pressure, but much less cloud than usual; rainfall slightly, but number of rainy days greatly, above the average. Temp. slightly below the average; it was warm till the 6th, and from the 22nd to 24th, but cold from 11th to 21st and 27th to 30th; W.S.W. winds prevailed on 13 days, and N.W. on 12 days, S.W. gales were frequent; max. temp. 58°·8 on 5th; min. 30°·1 on 18th; frost in air on 3 days, on grass on 18 days.—*Ashburton, Druid.* Max. temp. 58°·0 on 5th; min. 31°·7 on 15th.—*Teignmouth.* Max. temp. 62°·0 on 5th; min. 32°·1 on 15th and 18th; frost on grass on 11 days.

VI. *Clifton.* Max. temp. 60°·8 on 5th; min. 27°·2 on 18th; frost in air on 3 days, on grass on 11 days.—*Cheltenham.* Atmospheric pressure extremely irregular, great and rapid disturbances occurring; max. temp. 58°·6 on 5th; min. 23°·0 on 15th; frost in air on 9 days, on grass on 19 days.—*Ross, The Graig.* Rainfall nearly 30 per cent. above the average of 24 years, number of rainy days also proportionally in excess; max. temp. 59°·1 on 5th; min. 24°·8 on 18th; frost in air on 4 days, on grass on 19 days.—*Wem, Sansaw Hall.* Max. temp. 59° on 5th; min. 27° on 15th; frost in air on 5 days, on

grass on 23 days.—*Cheadle.* Max. temp. 56°·4 on 5th; min. 25°·1 on 18th; frost in air on 8 days, on grass on 21 days.—*Coventry, Coundon.* Max. temp. 57° on 5th; min. 24° on 17th; frost on 8 days.

VII. *Melton, Coston Rectory.* Very stormy and wet, the constant R hindering farming operations so much, that very little autumn corn could be sown. Max. temp. 58°·5 on 5th; min. 18°·0 on 18th; frost on 9 days.—*Stamford, Ketton Hall.* Though R fell on 24 days, the total is not remarkably great. Max. temp. 60° on 5th; min. 20° on 18th; frost in air on 7 days, on grass on 17 days.—*Horncastle, Bucknall.* Max. temp. 59°·5 on 5th; min. 22°·5 on 17th; frost in air on 10 days, on grass on 15 days.—*Nottingham, Strelley Hall.* Wet; 24 rainy days; rainfall about 1 in. above the average. The first and last weeks warm, the remainder of the month cold, with frosts most nights; on the whole the temp. was about the mean. Pressure very low and unsteady. S fell on 3 days. Wheat sowing very backward owing to wet weather.—*Worksop, Hodsock Priory.* Rather stormy and showery, with low bar., temperature about the average, and rainfall rather above. The mean pressure, 29·640, in. is lower than in any month since February, 1879; the number of rainy days was large, but there were no heavy falls.

VIII. *Macclesfield Park.* Rainfall excessive, being nearly 1·5 in. more than that of any other November during 32 years. Max. temp. 55°·8 on 5th; min. 27°·2 on 15th; frost on 8 days.—*Liverpool, Walton-on-the-Hill.* Unsettled and stormy, with a very fluctuating bar. Max. temp. 58° on 5th; min. 26° on 14th; frost on 8 days.

IX. *Wakefield, Stanley Vic.* Very changeable and most unfavourable for farmers. Max. temp. 59° on 5th; min. 24° on 11th, 12th, and 13th; frost on 8 days.—*Sedbergh.* Mean temp. 40°·6; max. 53° on 1st and 5th; min. 28° on 17th.—*Scarborough.* Rainfall ·70 in. above the average; no fog, and no gales except a moderate one on the 27th. Max. temp. 58°·2 on 5th; min. 32°·5 on 18th and 20th.—*East Layton* [*Darlington*]. Max. temp. 53° on 5th; min. 25° on 18th; frost on 12 days.

X. *Barnard Castle, Whorlton.* Constant R throughout the month, cold in the latter part; max. temp. 49° on 2nd and 23rd; min. 30° on 7th.—*Haltwhistle, Unthank Hall.* Max. temp. 54° on 5th; min. 23° on 17th; frost on 20 days.—*Carlisle, St. James' Road.* A succession of gales accompanied by very heavy R during the first 10 days of the month, after which fine weather prevailed for a week, with keen

frost; from the 18th to the end of the month the weather was of a most stormy character; max. temp. 56°·9 on 5th; min. 23° on 15th; frost in air on 12 days, on grass on 19 days.—*Elterwater, Woodlands.* Max. temp. 57° on 5th; min. 25° on 11th and 18th; frost on 10 days.

XI. *Llanfrechfa Grange.* Very stormy and unsettled, with more R than usual. Max. temp. 59° on 6th; min. 27° on 17th; frost on 13 days.—*Cardiff, Park Place.* Max. temp. 59°·8 on 5th; min. 28°·1 on 18th; frost on 2 days.—*Llandovery.* The wettest November remembered; max. temp. 57° on 1st and 5th; min. 25° on 14th; frost on 6 days.—*Llechryd, Castle Malgwyn.* Very wet, but no great fall of R on one day; frequent H and occasional T.—*Builth, Abergwessin Vic.* Max. temp. 53° on 4th and 5th; min. 28° on 14th and 17th; frost on 4 days.—*Carno, Tybrith.* Max. temp 52° on 4th and 5th; min. 18° on 18th; frost on 15 days.—*Menaifron.* A very wet month, only 4 days without R; gales and strong breezes at beginning.

XII. *Dumfries, Crichton Inst.* Wet and stormy, especially at the beginning and towards the end; T and L were of frequent occurrence, accompanied by S and H showers; the middle of the month was generally clear and frosty, and several fine auroræ were seen; rainfall above the average; pressure and temp. both low. Max. temp. 56°·8 on 2nd; min. 23° on 12th; frost on 21 days.—*Melrose, Abbey Gate.* Cold and unsettled; mean temp. 34°·5, or 3°·7 below the average; rainfall about the average; wind principally from W. and S., and moderate in force. Max. temp. 56°·3 on 5th; min. 14°·3 on 18th; frost on 23 days.

XIII. *North Esk Res.* [*Penicuick*]. Max. temp. 53° on 5th; min. 23° on 30th; frost on 20 days.

XIV. *Ayr, Cassilis House.* Max. temp. 53° on 1st; min. 18° on 13th and 17th; frost on 17 days.—*Glasgow, Queen's Park.* Max. temp. 56° on 5th; min. 25° on 14th; frost on 16 days.

XVI. *St. Andrews, Newton Bank.*—Rainfall the heaviest of any month of the year, only six days without R; frost set in on the 6th, and was almost continuous to the end of the month, occurring on 20 days, though never severe. Max. temp. 53° on 1st; min. 23° on 30th.

XVIII. *Lochbroom.* Very stormy; intensely cold; in fact, true winter weather.—*Loch Shiel, Glenaladale.* Cold and wet, without much wind; the last ten days very wet and wintry.

XIX. *Watten, H.R.S.* Wet and stormy; only three days without R.

XX. *Tipperary, Henry Street.* Very severe.—*Nenagh, Castle Lough.* Very wet, with great variations of temp.; frequent gales and L at night. The ground was in a constant state of saturation, which rendered the digging of a miserable crop of potatoes a difficult business.—*Newcastle West.* A month remarkable for R, wind and electrical phenomena.—*Ennis.* Cold, windy and squally.—*Miltown Malbay.* Stormy, wintry, wet and cold, with only 4 dry days; storms and boisterous weather, H showers and much T and L generally prevailed, and displays of aurora were frequent.

XXI. *Athlone, Twyford.* Max. temp. 56° on 5th; min. 27° on 12th and 14th; frost in air on 6 days, on grass on 21 days.

XXII. *Ballinasloe, Kilconnell Rectory.* The most stormy and tempestuous month remembered by any one living in these parts.

XXIII. *Seaforde.* Max. temp. 59° on 6th and 7th; min. 26° on 16th; frost in air on 15 days, on grass on 19 days.—*Belfast, New Barnsley.* The most stormy, cold and wet November for many years, leaving the ground perfectly saturated; R and frost alternating with showers of H, S and sleet.—*Bushmills.* Severe frost from the 8th to the 17th; remainder of the month cold, wet and stormy; rainfall 3·88 in. above the average. Max. temp. 55° on 5th; min. 23° on 13th; frost on 16 days.—*Londonderry, Knockan.* A very wet and unsatisfactory month. Max. temp. 52° on 1st; min. 42° on 17th.—*—Ramelton, Killygarvan.* Rainfall greater than that of any other month since 1874; temp. very low; heavy squalls of R and H and some T and L. Mean pressure 29·600 in.; mean temp. 38°; max. 53° on 5th; min. 21° on 14th; frost in air on 13 days, on grass on 18 days.—*Buncrana.* Very changeable weather during the month, most trying to health; very large rainfall. Max. temp. 57° on 12th; min. 28° on 13th; frost on 5 days.

DECEMBER.

I.—*Muswell Hill.* Rainfall near the average; from 1st to 24th, only 1·03 of R fell, while during the last 7 days 1·88 in. was recorded. —*Pinner Hill.* Max. temp. 55° on 27th; min. 18° on 10th; frost on 14 days.

II. *Reigate, Holmfels.* Max. temp. 56°·3 on 28th; min. 14°·5 on 1st; frost in air on 15 days.—*Croydon, Addiscombe.* Remarkable for the contrast between the temp. of the first and second half of the month, for unusually dense fogs on four days, and gener-

ally for its gloomy skies, damp atmosphere, and frequent rains. —*Hythe.* Very dull and showery; max. temp. 55° on 26th; min. 26° on 9th; frost on 10 days.—*Littlehampton.* Sharp changes of temp. were frequent, but at the end of the month the weather was most unwinterly; flights of birds very inconsiderable; veronicas, monthly roses, and violets in bloom. Max. temp. 50° on 26th, 27th, and 31st; min. 20° on 11th.—*St. Leonards.* Cloudy, wet, and mild, though from the 6th to the 12th, cold prevailed, and much S fell. Max. temp. 52°·4 on 26th; min. 26°·9 on 2nd; frost on 7 days.—*Iford.* Wet and mild, only 6 days without R; S storm on 7th.—*St. Lawrence.* Max. temp. 53°·5 on 20th; min. 28°·0 on 11th; frost in air on 6 days.—*Alton, Ashdell.* Max. temp. 55° on 27th; min. 11° on 11th; frost in air on 12 days.

III. *Buntingford, Throcking Rectory.* Dull and foggy; but little S. Mean temp. 37°·3; max. 53°·4 on 27th; min. 19°·1 on 11th; S on 5th and 8th.—*Winslow, Addington.* Wet; a short spell of frost occurred about the middle of the month, but the end was mild and stormy, with much R. Max. temp. 54° on 29th and 31st; min. 11° on 12th; frost on 17 days.—*Henley, Stonor Park.* Mild; unhealthy; green crops of all kinds plentiful; very little wheat sown; floods out very much.—*Oxford, Magdalen Coll.* Max. temp. 55° on 29th and 30th; min. 20° on 12th; frost in air on 12 days, on grass on 20 days.—*Banbury, Wroxton.* Max. temp. 54° on 27th: min. 8° on 12th; frost on 15 days.—*Northampton.* Cold weather on the 1st, followed by mild weather until 11th, when severe frost set in, lasting for three or four days. It was again cold on the 23rd and 24th, the remainder of the month being mild. Rainfall slightly above the average. Max. temp. 52° on 28th and 29th; min. 19° on 11th; frost on 13 days.—*Cambridge, Beech House.* Max. temp. 53° on 28th; min. 20° on 11th.

IV. *Southend.* Max. temp. 56°·6 on 27th; min. 22°·1 on 11th; frost on 11 days.—*Harlow, Sheering Rectory.* Rainfall ·44 in. above the average. Max. temp. 56° on 28th; min. 17° on 12th; frost on 17 days.—*Ipswich, Bishop's Hill.* Rainfall nearly double the average; the latter half of the month mild and foggy, as well as very wet.—*Rendlesham Hall.* Max. temp. 54° on 28th; min. 17° on 11th.—*Beccles, Ellough Rectory.* Max. temp. 48° on 30th; min. 17° on 12th; frost on 22 days.—*Diss.* Wet, foggy and windy; sharp frosts on 9th, 10th and 11th, and heavy fogs on the 14th, 15th and 16th; the latter half

of the month was changeable, unsettled, and very warm; roads, and country generally, heavily flooded.

V. *Salisbury, Alderbury.* Max. temp. 56° on 26th and 27th; min. 17° on 10th; frost on 6 days.—*Calne, Compton Bassett.* Weather during the first half of the month variable; S storms and hard frosts followed on 10th, 11th and 12th, and the latter half was foggy and showery, but much warmer. Max. temp. 55° on 27th; min. 15° on 11th; frost in air on 10 days.—*Weymouth, Langton Herring.* Rainfall above the average; from the 5th to the 12th the weather was fine but very cold, then followed mild and damp days with slight fogs, and the last 8 days of the month were wet and foggy. From 16th to 21st inclusive the range of temp. was only 7°, and from 26th to 31st only 5°; mean temp. 1°·5 above the average; max. 53° on 27th and 30th; min. 23° on 11th; frost on 9 days.—*Torquay, Babbacombe.* Very damp, dull and gloomy, with an average temp. and rainfall, but an excess of wet days. The diurnal range of temp. was small, and it was very cold from the 6th to the 11th, the min. in air (20°·4) and on grass (10°·5) being the lowest yet registered in December; from the 25th to 31st it was very mild, with almost incessant drizzle. S.W. to W. winds prevailed on 14 days, and N.W. on 6 days. Max. temp. 54°·2 on 27th.—*Ashburton, Druid.* Max. temp. 54°·6 on 26th; min. 25°·7 on 11th; frost on 6 days.—*Teignmouth.* Max. temp. 55°·8 on 30th; min. 24°·8 on 11th; frost in air on 7 days.

VI. *Clifton.* Max. temp. 55°·4 on 29th; min. 21°·0 on 12th; frost in air on 9 days.—*Cheltenham.* The most noteworthy feature of the month was the extraordinary high temp. from the 25th to the 29th, the mean for the five days exceeding that of 5 days in June.

	Mean Temp.		Mean Temp.
December 25th	46°·3.	June 11th	51°·9.
,, 26th	51°·0.	,, 12th	50°·6.
,, 27th	52° 2.	,, 13th	48°·7.
,, 28th	51°·7.	,, 16th	50°·2.
,, 29th	51°·2.	,, 17th	50°·9.
Mean...	50°·48.	Mean...	50°·46

Max. temp. 55°·3 on 27th; min. 17°·0 on 12th; frost in air on 11 days, on grass on 19 days.—*Ross, The Graig.* Remarkable for persistent R and S, for continuous dense fogs about 600 ft. high for 6 days together in the middle of the month, with thick rime on trees, and very low max. temp., and, during the last week, for heavy R and very high temp., the air being nearly saturated with moisture. Max.

temp. 52°·1 on 28th; min. 19°·6 on 11th; frost in air on 12 days, on grass on 18 days.—*Sansaw.* The heat of the latter part of the month was exceptional; prevailing winds from W. to S.W.; max. temp. 55° on 26th and 27th; min. 8° on 11th; frost on 13 days.—*Cheadle.* Max. temp. 53°·5 on 27th; min. 13°·5 on 12th; frost in air on 18 days, on grass on 22 days.—*Coventry, Coundon.* Max. temp. 56° on 28th; min. 21° on 11th; frost on 15 days.

VII. *Melton, Coston Rectory.* A great contrast between the beginning and end of the month, at first S and hard frosts, then a period of thick fogs, and at the end R accompanied by mild soft winds. Max. temp. 53°·5 on 28th, and 29th; min. 9°·0 on 12th; frost on 14 days.—*Stamford, Ketton Hall.* Excessively dull and foggy, with partial sunshine on a very few occasions. Max. temp. 55° on 27th and 28th; min. 13° on 11th; frost on 14 days.—*Horncastle, Bucknall.* Max. temp. 55°·5 on 29th; min. 21°·0 on 12th; frost on 11 days.—*Nottingham, Strelley Hall.* Very wet, damp, and sunless, rainfall about 2·3 in. above average. There were only 9 days on which the sun shone at all, giving a total of only 20·7 hours=9 per cent. From 10th to 21st no sunshine was recorded. First half of the month cold, with thick fogs, and S, the latter half warm, especially the last 6 days. Temp. on the whole about the average.—*Worksop, Hodsock Priory.* The principal features were the heavy fall of S, and the short and severe frost at the beginning of the month, low pressure, heavy rainfall and great absence of sunshine. The S lay on the ground to a depth of about 7 in., though much of it melted as it came; as it fell before the frost began, it effectually protected vegetation from the severe cold; the min. temp. for the year occurred on the 12th, the shaded ther. falling to 7°·7, and that on the S to −0°·8. During the first 20 days there was only one hour of sunshine, and the total for the month was only 16 hours, or 7 per cent. of the possible duration. The land is very wet and the country much flooded.

VIII. *Macclesfield.* Rainfall (5·59 in.) 83 per cent. above the average of 32 years, the only instances of a greater fall in December being in 1854 and 1868. The fact of 11·77 in. having fallen in the two consecutive months, November and December, is without a parallel. Max. temp. 52°·5 on 27th; min. 17°·4 on 12th; frost on 13 days.—*Liverpool, Walton-on-the-Hill.* The commencement of the month was cold and foggy, but towards the end it was rather warm. Rainfall about 1·00 in. above the average. Max. temp. 53° on 27th, 28th, and 29th; min. 17° on 11th; frost on 13 days.

IX. *Wakefield, Stanley Vic.* Very wet; farm work greatly hindered; roads almost impassable from S about the 6th. Max. temp. 54° on 28th and 29th; min. 14° on 11th; frost on 11 days.—*Sedbergh.* Mean temp. 37°·9; max. 50° on 28th and 29th; min. 22° on 12th; frost on 12 days.—*Scarborough.* A dull damp month; rainfall ·60 in. above the average. Mean temp. slightly above average; max. 53°·5 on 29th; min. 19°·3 on 12th; frost on six days.—*Lune Head* [*Brough*]. Cold and blustering, with severe snowstorms.

X. *Haltwhistle, Unthank Hall.* Max. temp. 45° on 27th, 28th, and 31st; min. 15° on 12th; frost on 21 days.—*Carlisle, St. James's Rd.* The first week extremely cold, wet, and disagreeable, with overcast sky, and scarcely a blink of sunshine; winter fairly set in on the 5th, when a cold N.E. wind brought frequent S showers, and keen frost prevailed for about a fortnight; the remainder of the month was overcast, with frequent R.—*Elterwater, Woodlands.* Rainfall below the average; max. temp. 55° on 27th; min. 21° on 11th and 12th; frost in air on 15 days.—*Shap.* The early part of the month was stormy, but quite seasonable; land very wet, but fresh and green.

XI. *Llanfrechfa Grange.* Very sharp frost prevailed in the middle of the month, but the last week was very mild and wet; max. temp. 56° on 17th; min. 17° on 11th; frost on 13 days. —*Cardiff, Park Place.* Max. temp. 53°·7 on 31st; min. 20°·2 on 11th; frost on 7 days.—*Llandovery.* A very wet month, a fitting end to a wet year; heavy floods at the end of the month; max. temp. 53° on 26th, 27th, and 31st; min. 19° on 10th and 11th; frost on 11 days.—*Builth, Abergwessin Vic.* Max. temp. 53° on 4th; min. 17° on 10th and 11th; frost on 14 days.—*Carno, Tybrith.* Max. temp. 49° on 27th; min. 8° on 12th; frost on 20 days.—*Rhiwbryfdir.* From 5th to 17th an unparallelled storm of S and drift, which caused work to be suspended for more than a week, but on the latter date a thaw set in, and during the remainder of the month almost incessant R fell.—*Menaifron.* Frost from 6th to 13th, with cold showers; the rest of the month very wet.—*Douglas, Victoria Rd.* Very wet; strong S.W. gales frequent; bright frosty weather from 8th to 13th inclusive, the remainder of the month being warm.

XII. *Dumfries, Crichton Inst.* The beginning of the month stormy; frost set in with considerable severity on 8th, and continued till the 15th, after which date the weather was very mild, moist, and gloomy. Rainfall heavy, but both pressure and temp. below the average; very

little sunshine; the month generally was disagreeable and cheerless; max. temp. 52° on 28th; min. 15° on 15th; frost on 24 days.—*St. Boswell's, Elliston.* The snowfall in December was the heaviest in the memory of man; here it was 4 feet deep with no drift; and the damage to glass-houses, trees, &c., was enormous.—*Melrose, Abbey Gate.* A cold and unsettled month; mean temp. (28°·2) 5°·6 below, and rainfall 2·86 in. above, the average. The S storm of the 7th will long be remembered, 27 in. falling between 9 a.m. and 6 p.m. with a N.E. wind. Max. temp. 50°·6 on 28th; min. –4°·0 on 15th; frost on 29 days.

XIII. *Galashiels.* The greater part of the fall in December consisted of S; the great fall of December 7th, 2·01 in. was the heaviest during the present generation.—*North Esk. Res.* [*Penicuick*]. Max. temp. 48° on 9th; min. 10° on 14th and 15th; frost on 22 days.

XIV. *Biggar, Wiston.* The heaviest S storm for many years, roads and railways all blocked up.—*Ayr, Cassillis House.* Max. temp. 53° on 26th; min. 4° on 15th; frost on 19 days.—*Glasgow, Queen's Park.* Max. temp. 51° on 28th; min. 9° on 15th; frost on 21 days.

XVI. *St. Andrew's, Newton Bank.* Very wet and stormy; a heavy fall of S commenced on 5th, with gale from N.E., the storm lasting with more or less severity till the 9th; the drifts were very bad, in fact it was the most severe S storm that has been known for many years; the frost also was very severe. Max temp. 49° on 28th; min. 6° on 14th; frost on 23 days.

XVII. *Keith, H.R.S.* Frost and S from 1st to 16th, and from 23rd till 27th; the remainder of the month being warmer, with R.

XVIII. *Lochbroom.* Intense frost prevailed during the first half of the month, the latter half being wet and remarkably mild.—*Loch Shiel, Glenaladale.* A fine winter month, with very little wind, the last 3 or 4 days very mild and calm.

XIX. *Watten, H.R.S.* Wet, but with no great storms or floods; several days and nights of intense frost about the middle of the month; here, the S did not at any time reach the depth of 3 in.

XX. *Nenagh, Castle Lough.* Frost set in on the 5th, and lasted with varying intensity until the 15th, when a sudden thaw set in; the latter portion of the month was wet, with high temp., and a saturated atmosphere.—*Miltown Malbay.* The month opened with bitter broken weather, frost set in on 5th of intense severity, and a week of sunny frosty weather followed; a thaw on the 14th was followed by variable weather till the 20th, thence to the end exceedingly wet.

XXI. *Athlone, Twyford.* Max. temp. 52° on 26th, 27th, and 28th; min. 15° on 15th; frost in air on 15 days, on grass on 24 days.

XXIII. *Seaforde.* Max. temp. 53° on 28th and 29th; min. 14° on 10th; frost in air on 15 days, on grass on 19 days.—*Belfast, New Barnsley.* S and sleet fell from 3rd to 5th, then severe frost till 14th; thaw on 15th, and R and occasional S fell till nearly the end of the month, which closed mild, wet, and spring-like.—*Bushmills.* Max. temp. 49° on 28th; min. 13° on 14th; frost on 19 days.—*Ramelton, Killygarvan.* Not a very bad month, only one storm, and that not very severe; rainfall ·75 in. above the average; severe frost prevailed for about 10 days, and there was much fog with it; mean temp. 33°·3, or 5°·5 below the average; max. temp. 49° on 18th and 27th; min. 14° on 13th; frost on 20 days.—*Buncrana.* Ten days strong frost proved fatal to potatoes not raised before it set in. Max. temp. 51° on 18th; min. 19° on 14th; frost on 12 days.

OBSERVERS' NOTES ON THE YEAR 1882.

ENGLAND.

DIVISION I.—MIDDLESEX.

ISLEWORTH, SPRING GROVE.—Rainfall about 5 in. in excess of the average; as there were 37 days on which less than ·01 in. of R fell, there were in all 192 days with R.

ISLEWORTH, DUNSTER LODGE.—With the exception of a prevalence of aphides, or green fly, the year proved free from widespread attacks of insects sufficient to cause serious damage, in consequence partly of the weather being suited to push on plant growth, and so support the crops under attack, and partly because the weather in some cases was not favourable for insect increase.

NOTTING HILL, LANSDOWNE CRESCENT.—The greatest weekly fall occurred in October from 15th to 21st, 2·20 in.; on five days during that month the fall in 24 hours exceeded ·50 in.

MUSWELL HILL.—The total rainfall (30·51 in.) was a little more than half an inch above the average of 10 years. The R was unequally distributed, January, February, March, May and August having all a decided deficiency, June and July a small deficiency; while April, September, October, November and December had all a considerable excess, that of October being the greatest—its aggregate being nearly double the average. The usual course of the weather was maintained, the latter months of the winter and all those of the spring being dry, while those of autumn and the early part of winter were wet; this is shown by the fact that only 15·88 in. fell in the first eight months, while 14·63 in. fell during the last four months. The most remarkable feature of the year was that the longest dry period occurred in January, there being 17 consecutive days without either R or S being recorded.

PINNER HILL.—The first part of the year was fine, the remainder rainy.

DIVISION II.—SOUTH EASTERN COUNTIES.

GODALMING, WITLEY.—The rainfall of the year was remarkable for the small total, as compared with the unusually large number of wet days; much of the R being of the character of Scotch mist, wetting everything, but not yielding much.

DORKING, ABINGER HALL.—Early months of the year very mild; spring and early part of summer somewhat cold and sunless; harvest promising, but damaged by bad weather.

CATERHAM VALLEY.—Over 1 in. of R fell in 24 hours four times; three times in April and once in October; between the 14th and 31st of October 5·60 in. of R fell.

BEDDINGTON.—Of the total rainfall 9·40 in. fell in the first six months, and 16·05 in. during the last six months. Heavy as was the fall in October (5·65 in.), that of October, 1880, was much heavier, viz., 6·79 in.

CROYDON, ADDISCOMBE.—A warm, dull, and windy year.

TENTERDEN, SUMMERHILL.—The year was remarkable chiefly for continuous gales. Hay crop abundant; corn crops not an average; hop crops generally a failure from blight and mould; root crops good. The oaks, which lost their leaves from the gale of April 29th, put out fresh ones in July.

BENENDEN.—A bad year for farmers; the promise of spring spoilt by the gale of April 29th; abundant hay crop ruined by wet in June and July; harvest injured by wet and rough weather in the latter half of August. The first 10 days of October was the only time fit for corn-sowing. Winter mild.

TENTERDEN.—The first three months were dry, also May, and the first half of August; very few TSS. Much calm foggy weather in January, and a rainless period of 16 days from 13th to 28th. March 12th to 19th dry, with beautifully calm spring-like weather; blackthorn in full bloom. Dry and cold, with N.E. winds early in April and in the middle of May; last three weeks of April very wet, with violent gales on 25th and 29th. High wind on August 23rd and several days in November. Gale on October 24th, almost as bad as that of October 14th, 1881. Heavy snowfall on December 7th, then a week of frost.

GOWDHURST.—Dry and mild to the end of May, afterwards continuous wet and want of sun, ruining all prospect of hops and fruit.

ASHFORD, BETHERSDEN.—The worst harvest and seed-time ever

known in Kent; from August 14th to December 31st only 49 days without R.

TONBRIDGE, CLARE HOUSE.—Vegetation and foliage very forward up to April 29th, on which day a heavy S.W. gale occurred; the wind and R, loaded with salt, destroyed everything exposed to it. This, followed by insect blight, ruined the hop plantation; in many gardens around this part not a single hop was picked. Latter part of the year very damp.

ASHFORD, WESTWELL.—The most noteworthy features of the year were the excessive dryness of January and February, and the very heavy rainfall of October.

SEVENOAKS, RIVER HILL.—A cheerless summer and wet autumn, hay crop above the average.

OSPRINGE, LORENDEN.—The wettest year since 1866, excepting 1872, when 34·18 in. fell; the fall of 2·13 in. in 24 hours on October 28th is the largest ever recorded here, and on no previous occasion has more than 1 in. fallen on two consecutive days.

RAMSGATE, THE VALE.—Rainfall 1·65 in. below the average of seven years; no fall of 1 in. in 24 hours occurred during the year, a fact unmatched since 1876; number of rainy days above the average. Max. temp. on August 2nd 79°·2; min. on December 12th 24°·4. The year was marked by disastrous storms of unusual violence, that of April 29th being especially destructive.

MARGATE.—Rainfall slightly below the average, no fall of 1 in. in 24 hours. A mild year; harvest very successful; beautiful displays of aurora on October 2nd and November 17th.

ERITH, CROSSNESS.—Rainfall about the average of 20 years, but number of wet days greatly in excess, and only twice exceeded during the 20 years; only two falls exceeding 1 in. in 24 hours.

LITTLEHAMPTON.—Pleasant spring, deceitful summer, wretched autumn, and worse winter; a mild year on the whole.

WORTHING.—Rainfall 4·20 in. above the average of 15 years; the fall for October (8·46 in.) was very heavy, having been only once exceeded, viz. in 1865. On October 15th and 16th 3·50 in. fell in about 30 hours, of which quantity 2·55 in. fell in 15 hours. The number of rainy days has only once before been exceeded, viz. in 1872.

MIDHURST, LYNCH.—The wet, and the great storm at the end of April, were very injurious to the cereal crops, which up to the middle of April, had been very promising; as an ungenial summer followed,

the year was very disappointing to agriculturists, corn being deficient in quantity and poor in quality, while the land produced large quantities of weeds. The seasons throughout were abnormal, winter and summer temp. approaching each other nearly.

BRIGHTON WEST.—The eighth consecutive year with rainfall above the average; winter mild; very fine March; showery, sunless summer; good harvest month. Great rainfall in October, 8·49 in., of which 2·85 in. fell in the 24 hours ending 8 p.m. on 16th. On the whole a rainy, cheerless, sunless year.

LEWES, IFORD.—The first five months gave promise of a productive year, but the cold June and July destroyed the hopes of the farmer, and the excessively wet autumn gives a gloomy outlook for the next year's crops.

MARESFIELD, FOREST LODGE.—The rainfall at this station during 1882 has been 36·39 in., an amount in excess of the annual average of the preceding 26 years (31·85 in.) by 4·54 in. This excess wholly accrued during the last six months of the year; inasmuch as, up to June 30th, only 12·43 in. had fallen. October was exceedingly wet, 7·75 in. having been found during that month in the gauge. This quantity has only once been exceeded in the corresponding month, and that was in 1865, when 11·51 in. were measured. The average October fall during the past 26 years has been 3·77 in. The heaviest fall in any one 24 hours in 1882 was 1·68 in.; found in the gauge at 9 a.m. on October 22nd, and entered, according to regulations, against the previous day. It was less, however, from individual heavy rains than from the almost incessant drizzling downpour that the average has been exceeded this year. During the interval between the 11th and 28th of January the barometer stood higher than I remember it to have done before. On January 17th and 18th the mercury disappeared within the vernier tube, even when this was raised as high as the mounting would permit it to go; and I could only read it by depressing the tube and making the top of this tube a tangent to the mercurial surface instead of the bottom. At 9 a.m. on the 18th the vernier read 30·678 in. This is uncorrected for temperature, which was very close to 32° F.; but it further requires reduction to the sea-level; and when I say that the barometer cistern is 248·42 ft. above the level of the sea, it will be seen to what a tremendous height this correction will bring it. It is noteworthy that rain fell on the 15th with the barometer (uncorrected) standing at 30·513 in., and rising. S fell on March 21st. Altogether rain was measured i n 1882

on 222 days, as against 188 in 1881, 186 in 1880, 223 in 1879, 192 in 1878, 215 in 1877, 201 in 1876, 184 in 1875, and 186 in 1874. As strenuous efforts are again being made to establish a supposed connection between the number of sunspots and the amount of rain which falls, it may not be uninteresting to take from my own register, extending over a period of 27 years, some details of falls notably over or under the average to test this hypothesis. The heaviest fall ever observed at this station was in 1872, when 46·15 in. fell. This was two years after a sun-spot maximum. At the actual date of the maximum (1870) only 24·02 in. were measured. In 1858, two years before a maximum, only 21·13 in. fell here: while in 1877, five years before a maximum, 40·74 in. descended. In 1863, I had only 23·70 in. in the gauge. This was three years before a sun-spot minimum. At the date of one maximum 24·02 in. only fell at this station; at that of another (1860) I had 39·02 in.; and so on. In fact, selecting examples at random, I am utterly unable to find the slightest trace of connection between any particular phase of solar disturbance (or quiescence) and our Sussex rainfall.

BOURNEMOUTH, TREGEN.—Rainfall about 7 in. above the average; the fall of October was the heaviest in any month for many years.

CHRISTCHURCH, MUDEFORD.—The first three months unusually dry, so that in spite of the rainy summer, the rainfall to the end of September was below the average. The rainfall in October was greater than in any other month since observations were commenced in 1868.

SOUTHAMPTON, ELING HOUSE.—The rainfall of the last six months was nearly double that of the first half of the year; and that of the two months, October and November (nearly 12 in.) is almost unprecedented.

BOTLEY, MOORHILL SHEDFIELD.—Only three weeks of real summer; very stormy autumn; very wet October.

ROMSEY, MICHELMERSH RECT.—Rainfall 2 in. above average of eight years; number of wet days 28 above average.

ALTON, EAST TISTED RECTORY.—Rainfall about 6 in. above the average; the summer was unusually cloudy, wet, and chilly; immense hay crop, but of inferior quality; wheat in many places short and deficient in quality. Magnetic storms of unusual violence and auroræ of exceptional brilliancy occurred in October and November.

WINCHESTER, HARESTOCK.—January generally fine; rainfall in February much below the average; less wind in March than usual; much cloud in June and July; much more wind in November than

usual, and no fog; December less wind and more fog than usual. Summer deficient in heat.

ROTHERWICK, TYLNEY HALL.—A most extraordinary year, the rainfall being generally about the average, but immense quantities falling when fine weather was wanted, *e.g.*, hay-time and wheat-sowing.

BLACKWATER, HURSTLEIGH.—Rainfall below the average; the first three months very dry, the total fall being only 4·43 in. April and October were the only months in which the rainfall was more than a few hundredths above the average, the latter month being very wet.

LONG WITTENHAM.—A dry spring; exceptionally wet April, the amount for that month being the largest recorded during 30 years. Very stormy autumn, with much R.

DIVISION III.—SOUTH MIDLAND COUNTIES.

SOUTHGATE, THE LAWNS.—Winter very mild, spring moist, enormous crops of hay, much spoilt in making, a wet harvest, but root crops good.

WATFORD, WANSFORD HOUSE.—The eighth consecutive year with rainfall considerably above the average, number of rainy days also very large, the excess is chiefly attributable to the rainfall of the last three months.

WELWYN, DATCHWORTH RECTORY.—Another year with rainfall considerably above the average, mainly due to the great excess in October. A great number of small falls, and the total number of rainy days very great. Temp. very equable.

STEVENAGE, KNEBWORTH—The wettest year of the eight during which a register has been kept; October was the wettest month during the eight years; during the last six months, July to December, out of the 182 days, 152 were wet.

BUNTINGFORD, THROCKING RECTORY.—A deficiency in the mean temp. was again noticeable in every month but March, being greatest in January, June, July and September; October was remarkably wet, the wettest October in fact since 1865, the fall during the three autumn months representing 34 per cent. of the total fall; no very heavy falls were experienced, 1·04 in. on April 25th being the only fall exceeding an inch in 24 hours.

SLOUGH, LANGLEY.—Max. fall for the year only ·78 in., the smallest during the 11 years observed; total fall slightly above the average; October the only month with an extreme rainfall.

WINSLOW, ADDINGTON MANOR.—The wettest year of the past twelve; from October 15th to November 8th R fell daily, the total for the 25 days being 7·12 in.; the hay crop was wonderful, but much of it was damaged by wet, and a considerable amount carried away by floods. Owing to the constant R in the autumn it was almost impossible to get the wheat sown.

WHITCHURCH RECTORY.—The mild winter gave way to a miserably cold and backward spring, favourable for grass but not for corn. The great number of wet days (40 per cent. above the average) shows that dull, cloudy, weather marked the whole year.

OXFORD, MAGDALEN COLL. LABORATORY.—Rainfall 6·65 in. above the max. previously recorded; floods out round Oxford from the end of September to the end of the year.

BANBURY, WROXTON.—Spring promising, summer disappointing, autumn disheartening, winter disastrous.

DAVENTRY, FAWSLEY.—The first three months were mild and dry; the summer, with the exception of a fine hot fortnight early in August, was cold and sunless; the autumn was very mild; the last three months of the year were exceedingly wet.

ST. NEOTS, WARESLEY.—Rainfall 3·05 in. above the average of 20 years.

THRAPSTONE, HARGRAVE.—The excess of R, and especially the heavy rainfall in July, accompanied by a low temp., was very injurious to the wheat crops. The constant R during October and November prevented the sowing of the usual acreage of wheat for next season.

KETTERING.—Rainfall 5·69 in. above the average.

PETERBOROUGH.— The first four months of the year were extremely dry and favourable for field operations. A "dripping" June; October wet and inclement; autumn unfavourable; wheat sowing late and difficult.

MAXEY VIC. [MARKET DEEPING].—Longest dry periods 13 days from March 7th to 19th, and May 9th to 21st; longest wet period 25 days—October 15th to November 8th. On 17 days, more than ·50 in. fell, three of them being in October.

BEDFORD.—March and April were very mild, bringing pastures very forward. June was cold and July wet. The closing months of the year were very wet, causing delay in planting the wheat.

TEMPSFORD HALL.—Floods more or less from the middle of October to the end of the year.

GRANCHESTER MILL.—Mills stopped 33 days by floods during 1882.

CHATTERIS, THE PRIORY.—Continuous R in June, July, and August; exceptional amount in October, generally equable temp.

MARCH.—Rainfall 3·93 in. above the average of 7 years, and the largest during that period.

WISBECH, COLDHAM HALL, ELM.—A great contrast between the early and concluding months of the year, the first-named being dry, with few days of R, the latter almost continuously rainy; no very heavy falls during the year, 1 in. being only once recorded in 24 hours. A fairly productive season.

WISBECH, BANK HOUSE.—The aggregate fall of the last three months of the year, 12·42 in. is much above the average.

DIVISION IV.—EASTERN COUNTIES.

DUNMOW, HIGH RODING.—Rainfall ·41 in., and number of wet days 18, above the average of 16 years.

BRAINTREE, BOCKING.—The average rainfall from 1851 to 1875, was 24·20 in., but the wet years since the latter date have raised the value 1·15 in., the average from 1851 to 1882 being 25·35.

HADLEIGH, BOXFORD.—Very little dry weather after May.

IPSWICH, BELSTEAD HALL.—Many local storms causing a heavy fall at one place, while at another only ten or even sometimes two miles off none fell.

IPSWICH, BISHOP'S HILL.—Rainfall 4·72 in. above the average, the excess being chiefly in the last 4 months of the year, although April also was very wet.

WOODBRIDGE, BANK HO.—Rainfall 5·56 in. above the average of ten years.

ASH BOCKING VIC.—Fine and dry during the first quarter of the year. Hay got in dry and well, wheat also, barley injured by R. No excessive R in October. Wet and mild December with no S.

IXWORTH, BARNINGHAM.—The greatest rainfall for 16 years, exceeding that of 1872 by 3·71 in.

DISS.—After a warm winter and a wettish spring, came brilliant weather in May, and a large hay crop which was generally well secured. The harvest also was interrupted by wet weather, but was one of abundant produce. In autumn the weather was rough and wet, and the heavy rainfall of October (6·80 in.) was remarkable, as

were its fearful gales and storms, notably that of the 24th. The floods of the last quarter were very destructive, and roads were rendered impassable which I do not remember to have been so before. Rainfall of the year greatly in excess of the average; on the whole a healthy year.

GELDESTON.—Rainfall 5·72 in. above the average of 17 years; April, June, October, November and December had rainfalls above the average.

GELDESTON RECT. The first quarter fine and dry; the spring quarter favourable for seeding; summer was cold and dull, unsuitable for securing a splendid hay-crop, and for maturing the corn; the harvest weather, fine at first, became wet and injurious to the barley crop. The winter quarter had an unusual rainfall, nearly 13in. S fell only once during the year.

NORWICH, EATON.—Very wet harvest, corn much injured.

NORWICH, ESSEX ST.—I believe this year's rainfall to have been in the East of England the greatest within the present century, the next in order being 1878 (32·80 in). The fall in October was very great, over 1 in. in 24 hours being registered three times.

SPROWSTON, OAK LODGE.—More R fell in 1882 in this county than has been recorded in any other year during the past 43. April, June, October, November aud December were the wet months. Scarcely any S, and very little frost.

EAST DEREHAM.—The weather during the early part of the year was remarkably open, the temp. rising to 68° on March 18th, but later there were some frosts which did considerable injury. In June, July and August there were some seasonable days, but very little settled weather. April, June, October, November and December were all very wet, and in the last three months there was more wind than usual, and a great deal of fog and dull weather. The rainfall for the year was several inches above the average.

NORTH WALSHAM, WORSTEAD VIC.—Only 4·5 in. of R fell in the first three months, but 12 in. in the last three months of the year.

LYNN, HILLINGTON.—A mild winter was followed by a coldish spring, wet summer and autumn, and mild winter.

HOLT, LETHERINGSETT HALL.—Rainfall in the autumn considerably above the average.

DIVISION V.—SOUTH-WESTERN COUNTIES.

DEVIZES, BISHOP'S CANNINGS.—The wettest year of the past 10, and very tempestuous, great gale on April 29th.

CALNE, COMPTON BASSETT.—Very mild at the beginning. Spring wet and cold, followed by a wet and cloudy summer. Autumn continuously wet, and the R in November and December completely saturated the land.

WESTBOURNE [BOURNEMOUTH].—January and February were wonderfully mild and warm, very many flowers in bloom in garden, and half-hardy perennial climbers kept their shoots green all through the winter.

WIMBORNE, WESTBOROUGH.—The first quarter unusually dry, the other three unusually wet, the total rainfall for the year being much in excess of the average; hay was plentiful, but much was spoiled by the showery weather.

WIMBORNE MINSTER, CHALBURY.—The first quarter was uncommonly dry, only 3·13 in. of R falling, and the last quarter the opposite, 13·89 in. falling. From January 12th to February 12th, only ·07 in. of R fell.

SHERBORNE SCHOOL.—An exceedingly wet year, nearly 22 per cent. above the average of six years; eight months had rainfalls above the average, and the number of wet days in the last three months was excessive.

PLYMOUTH NAVIGATION SCHOOL.—Rainfall about 11 per cent. above the average, number of rainy days 22 per cent. above it. Temp. about the mean with no extreme readings; max. 75°·0; min. 22°·8. Duration of sunshine only 33 per cent. of the possible amount; an unusual prevalence of W. winds.

IVYBRIDGE.—An unusually wet and cold season; fruit almost a total failure.

TORQUAY, BABBACOMBE.—A wet year, with average pressure, temp., humidity, and amount of cloud. The wettest year since 1877; longest dry period 18 days, July 6th to August 12th; longest wet period 14 days, October 14th to 27th; rainfalls exceeding 1 in. in 24 hours occurred on four days. The first quarter was very mild and dry, with high bar.; the last quarter was very damp and wet; June, July, September and October were cold and wet; April and November wet and stormy.

CLEVELANDS [LYME REGIS].—Rainfall 4·41 in. above the average of 15 years; October the wettest during that period, 8·45 in.; R fell on 32 consecutive days from October 10th to November 10th.

EXETER INSTITUTION.—One of the wettest years since observations were commenced in 1813, during which time only four years

have had larger rainfalls—viz., 1828, 39·60 in.; 1852, 42·67 in.; 1872 46·00 in.; 1876, 40·30 in.

EXETER, BRAMPFORD SPEKE.—The first quarter very mild and dry, but nearly all the remaining months were wet, and the total rainfall is nearly one-sixth above the average; the number of wet days is also large. Of the last 100 days of the year only nine were without R, and there were no two consecutive dry days.

HOLSWORTHY, CLAWTON.—Hay crops generally badly saved; apples a total failure; potatoes universally bad, both in quantity and quality.

HONITON, GITTISHAM.—A wet year; unusual absence of sun; from October to end of year the land was continually soaked.

TIVERTON.—Rainfall 7·50 in. above the average; number of wet days 27 above average.

ILFRACOMBE.—The last three months of the year were unusually wet, the rainfall for this period being nearly double that for the same period of the preceding year.

ST. AUSTELL, TREVARNA.—The greatest rainfall since 1872.

PAR STATION, PENELLICK.—A year of almost continual showers, cloudy atmosphere, and little sunshine.

BODMIN, CASTLE STREET.—Remarkable for excessive rainfall, but especially for the great number of rainy days; the total fall has only been exceeded once during 33 years, viz., in 1872, when 71·93 in. fell.

BODMIN, FORE STREET.—Only 12 days without R from September 23rd to the end of the year; total fall during that period 26·01 in. on 87 days.

STRATTON, WEEK ST. MARY.—First half dry, second half wet, and summer months cold.

CREWKERNE, BINCOMBE HOUSE.—Total rainfall 7·14 in. above the average of 15 years.

ILMINSTER, WHITE LACKINGTON.—Total rainfall 4·92 in. above the average of 10 years; temp. also above average.

MILVERTON, HALSE RECTORY.—Total rainfall 6·59 in. above the average of five years.

MILVERTON, FITZHEAD.—Another summerless year. June was cold and wet. I suppose there has hardly ever fallen so large an amount of R in three months as was registered in October, November, and December; the heavy rains of October 15th and 16th caused very serious floods in parts of Somerset; the last few days of the year were exceedingly mild.

MINEHEAD, EXFORD RECTORY.—Remarkable for the extreme wetness of the latter half, and the almost incessant R, with frequent hailstorms of the last three months. The total rainfall is the largest recorded during eight years, and exceeds the average by 21 per cent.

BATH, ROYAL LITERARY INST.—Rainfall considerably in excess of that of any other year during the last two decades, the total being nearly 12 in. above the average.

DIVISION VI.—WEST MIDLAND COUNTIES.

BRISTOL, CLIFTON.—The wettest in a series of 30 years; the average rainfall of the 11 years 1872—1882, is 39·17 in., showing an excess above the 30 year average of 4·85 in.

FAIRFORD, KEMPSFORD.—The total rainfall is the highest recorded during 21 years, the next in amount being 1875, when 34·83 in. fell.

FRAMPTON-ON-SEVERN, SAUL LODGE.—The total rainfall (40·40) is the highest recorded during 25 years. The previous largest fall was in 1872, when 38·96 in. fell. I have no record of any approach to so continuous a wet period as the last six months of 1882, when 25·27 in. of R fell. It rained on the average nearly $4\frac{3}{4}$ days in every week. The increase in the rainfall here in the 25 years from 1858 to 1882 is remarkable, and worth recording.

	Average Annual Fall.	Greatest. Amount.	Greatest. Date.	Least. Amount.	Least. Date.
13 years, 1858-70	24·42	30·28	1869	18·86	1864
12 ,, 1871-82	31·95	40·40	1882	24·06	1873

So that the *least* year's rain in the last period is nearly equal to the annual average of the previous 13 years, and the annual average fall of the last 12 years is nearly $1\frac{3}{4}$ in. more than the *greatest* year's rain in the first period. The increase in the annual average of the last 12 years, on that of the previous 13 years is more than $7\frac{1}{2}$ in.

NEWNHAM-ON-SEVERN.—After September, almost continuous R, very unsettled, stormy, and sunless. Total rainfall of the three months, 16·12 in., or nearly a third of the total for the year.

NORTHLEACH, HAMPNETT.—Rainfall believed to be about 50 per cent. above the average. R fell on an average on four days out of each week.

GLOUCESTER, BARNWOOD.—Rainfall 11·62 in. above the average, in the first half of the year the excess was 1·87 in., and in the second half 9·75 in.

CHELTENHAM, BATTLEDOWN.—Excessive rainfall in all months, except March and May, and low temp. throughout, except for ten days in August.

CHELTENHAM.—Rainfall 5·38 in. above the average of five years, number of wet days 21 above it; mean temp. 48°·7, being 1°·1 above the average.

ROSS, THE GRAIG.—Another wet year; only two fine intervals, viz., from May 8th to 21st, and July 28th to August 11th, otherwise no period of five days without R, and only three periods of four days. Number of rainy days only once exceeded, viz., in 1872, which had two more. The depth and frequency of S in the closing months was also remarkable.

BRYNGWYN.—The year was remarkable for frequent and continuous R, but with few excessive falls; both total fall and number of rainy days far exceed the average. Summer temp. low; autumn stormy.

LEDBURY, CANON FROME VIC.—Rainfall about 8 in. above the average of five years, and the year was remarkable for continuous R, rather than for heavy storms; no hot weather, hops and fruit complete failures; very little wheat planted at the end of the year, the ground being completely saturated.

BISHOP'S CASTLE, CASTLE STREET.—The wettest year since observations were commenced in 1874; it opened with splendid promise, which was verified by good crops of grain, but owing to there not being three consecutive dry days after the middle of September, the laggards and the hill farmers were unable to harvest a great quantity of their grain. All fruit crops a total failure; other crops poor and unimportant, owing to absence of sun.

BISHOP'S CASTLE, MORE RECT.—A very fine season until June; very wet afterwards, except a period of 10 days in September.

CHURCH STRETTON, PREEN MANOR.—October, November, and December very wet, even worse than in previous years, disastrous to all farming operations.

BROSELEY, BENTHALL HALL.—An exceptionally wet year, rainfall exceeding that of any of the four preceding years, and the average of that period by 5·03 in.

OSWESTRY, HENGOED.—A most unpropitious year, the only real summer weather being in the first half of August.

BURTON-ON-TRENT.—Total rainfall the greatest during nine years, exceeding 1875 by 2½ in. The severe S and R of October 24th

following upon wet weather, produced the highest flood since October 1875.

BURTON-ON-TRENT, SHOBNALL.—Rainfall 8·32 in. above the average of seven years; number of rainy days 28 above it; longest dry period 16 days, from May 7th to May 22nd.

ALSTONFIELD VIC.—The wettest year since 1872.

GREAT MALVERN, HORNYOLD TER.—Rainfall heavier than that of any other year during the past 10, and 8·09 in. above the average for that period.

TENBURY, ORLETON.—The rainfall (40·71 in.) exceeds that of any year since 1830, except 1852 and 1872, when 45·43 in. and 44·16 in. fell respectively.

WARWICK, PRIORY GARDENS.—Very cold, with a rainfall about 6 in. above the average.

COVENTRY, RYTON-ON-DUNSMORE.—The greatest rainfall during the past five years; 4 in. above the average for that period.

COVENTRY.—Total rainfall the greatest of any year during the past 16 except 1872, when 39·48 in. fell.

DIVISION VII.—NORTH MIDLAND COUNTIES.

BARKBY VIC.—No real summer weather. Harvest moderately well got in, ground generally very wet, and floods frequent.

SYSTON.—Rainfall 4·54 in. above the average of 14 years.

MELTON, COSTON RECTORY.—The early part of the year was marked by the high bar. in January and the smallness of the rainfall; this deficiency was, however, soon made up, and the total fall is in excess of that of any of the nine preceding years, being 6·31 in. above the average. Mean temp. 1° above the average.

SPALDING, PODE HOLE.—In Lincolnshire, 1882 will be remembered as a year of floods and disasters. Sudden floods and broken banks are prominent features. Hay harvest good; corn harvest much retarded by wet; sprouted grain very prevalent.

SLEAFORD, BLOXHOLM.—The year 1882 was disastrous to agriculture; very excellent crops of all kinds, but heavy rains in August greatly injured the grain.

LINCOLN, DODDINGTON.—The greatest rainfall since 1872.

GRIMSBY, AYLESBY. — Decidedly the wettest year during the last 10; rainfall 7·23 in. above the average.

ULCEBY, KILLINGHOLME.—Rainfall and number of wet days, the greatest of any year during the past 17, with the exception of 1872.

KINGSTON GARDEN.—First quarter very mild, and consequently promising to the agriculturist; second quarter cold; the month of July promised well for a very fine harvest, but from August to the close of the year was cold and very wet, disappointing to a great extent the good prospects of the opening months.

CROPWELL BISHOP, THE GROVE.—Fine and mild till the middle of March; April also mild, but rather wet; no great heat in the summer; October very wet; November and December very unsettled, and heavy S in the latter month.

NOTTINGHAM, STRELLEY HALL.—A very wet but not a cold year, the total rainfall (37·43 in.) is probably nearly 7 in. above the mean. Few heavy falls, but a large number of rainy days (218). The only dry months were fortunately those most important for the harvest, August and September; of the remaining ten, six were wet, October and December particularly so. The first three months were very warm, with great absence of frost and S; the summer months were cold with little sun. The mean temp. of the year (47°·6) is probably very near the average. The total duration of bright sunshine was 1334 hours, or 28 per cent. of the possible duration. All farm crops excepting, perhaps, potatoes, are good, the corn being got in much better condition than during the last few years.

WORKSOP, HODSOCK PRIORY.—The year was marked by very few extremes of temperature, the winter being unusually mild, and there being no summer weather at all. The mean temp. for the year is 48°·3, which is about the average; the mean temp. of the soil at a depth of 1 ft. at 9 a.m. was 49°·2, that of the air at the same hour being 48°·8. The duration of bright sunshine was 1367 hours. Rainfall was much in excess of the average, and greater than in any of the preceding six years except 1880; the number of rainy days was also larger than in any year during that period. The spring was a very early one up to the end of May, but in June things seemed to stop short, and were after this, if anything rather late. The crops both of hay and corn were fair, and were well got, and, as turnips were also good, farmers hereabouts have done better than of late years; the wet autumn, however, interfered with work, and though most of the wheat was sown on the light lands, very little could be got in on heavy soils.

WINSHILL.—The wettest autumn since 1852.

DERBY, CHRIST CHURCH VIC.—The wettest year registered since observations were commenced seven years ago.

DERBY, SPONDON.—No summer, except three days in August; cold, gloomy, dull and wet almost throughout the year.

STUFFYNWOOD HALL.—The last three months excessively wet, especially December; in July there were only three days on which R did not fall.

CHESTERFIELD, BRIMINGTON HALL.—Spring very early and fine, and fruit trees blossomed early, but were all cut off by late frosts; both hay and corn harvests much impeded by heavy rains; during the last three months of the year the rainfall was very heavy, rendering the land unfit to receive the seed; the whole year was cool, the temp. rarely exceeding 70°.

DIVISION VIII.—NORTH-WESTERN COUNTIES.

CHELFORD, ASTLE HALL.—A very wet year, the beginning mild, especially March.

NORTHWICH, WINNINGTON.—The wettest year since 1872, rainfall 6·89 in. above the average of 14 years.

NESTON, HINDERTON.—Rainfall 11 per cent. above the average of 20 years.

FRODSHAM, FOX HILL.—A fine spring with less than the average amount of R, a very wet autumn, not so much from excessive R, as from the number of rainy days, very little T. Harvest better than the average.

MANCHESTER, URMSTON.—Remarkable for the number of wet days, and for the quantity of R; there were 26 wet days in July, 21 in June, 23 in October, and 24 in November.

MANCHESTER, ARDWICK.—Rainfall 9 to 10 in. above the average.

ECCLES, MONTON GREEN.—Rainfall much in excess of the average. June and July were the wettest months, and September was the driest.

BLUNDELLSANDS, PARK CORNER.—The greatest number of wet days since observations commenced in 1876; total fall only exceeded in 1877; July and November very wet.

BOLTON-LE-MOORS.—Rainfall 6·83 in. above the average of 51 years.

ORMSKIRK, RUFFORD.—Rainfall 3·24 in. above the average of 10 years.

CHORLEY, WHITTLE-LE-WOODS.—Wet and cold, rainfall 10 in. above the average; the winter and spring were very mild.

LYTHAM, WOODVILLE TERRACE.—Wet, though not quite so wet as 1881; the number of wet days, however, exceeded that of 1881. February was the driest, and July the wettest month. Of the total rainfall, three-fifths fell in the latter half of the year.

BURNLEY, BRIERCLIFFE VICARAGE.—An unusually wet year.

BLACKPOOL, SOUTH SHORE.—Rainfall 8·63 in. above the average of 27 years.

ECCLESTON, ELSWICK LODGE.—Rainfall rather above the average, and number of wet days considerably above it.

ST. MICHAEL'S-ON-WYRE.—The driest February since observations were commenced in 1876, and the wettest April, June, and July in the same time.

BARROW-IN-FURNESS.—Rainfall 5·11 in. above the average of 10 years, and the greatest amount for any year since 1877.

CARTMEL, HOLKER.—Rainfall 5·50 in. above the average of nine years; July and November being the two wettest months; January and February were very mild and open, but keen east winds and frosts in April proved very destructive to fruit blossoms; moderately favourable weather prevailed both for hay and corn harvests. Mean temp. 46°·5.

CARTMEL, PIT FARM.—Very wet; January, February, and March, very mild; June and July, cold and wet, their temp. and rainfall much the same as in 1881. Crops had got on so well previously, that they were not stopped, and turned out of good quantity, though in some cases the quality was hurt by continuous R.

CARTMEL, BROUGHTON HALL.—Rainfall nearly 6 in. above the average, and number of rainy days 34 above it; the year generally was warm and moist, with temp. equable throughout, but with frequent sudden changes in 24 hours.

DIVISION IX.—YORKSHIRE.

ROTHERHAM, MOORGATE GROVE.—The rainfall of the three months October, November, and December, is much in excess of any corresponding period during 18 years, and nearly double the average.

WATH-UPON-DEARNE, CHAPEL STREET.—Early part mild, summer very cloudy like the three preceding summers, and cooler than

the average; June and July, October, November, and December, very wet.

DONCASTER, HATFIELD.—The winter was dry and mild; spring wet and cold; summer was wet and cold, except the first fortnight in August, when there was some bright hot weather. Autumn very rainy and cool, little frost till the first fortnight of December, then frosty with abundance of S.

MELTHAM, HAREWOOD LODGE.—June, July, October, November, and December were excessively wet, hardly a fine day from September 25th to the end of the year.

WAKEFIELD, ALVERTHORPE HALL.—The seasons were less favourable than in 1881; two nights of strong frost towards the end of May, destroyed almost entirely the wall fruit, and from the excessive R and absence of sunshine in the autumn, what was left never obtained ripeness or flavour.

WAKEFIELD, STANLEY VIC.—A very wet year, rainfall 4·83 in. above the average.

GOOLE.—Rainfall nearly 9 in. above the average of 7 years; the land having been so often and thoroughly soaked with R during the autumn and winter, allows but a poor prospect for the coming corn crop, much of which will have to be re-sown.

THORNTON-IN-LONSDALE, HALSTEADS.—Much the wettest year for some time, the total exceeding that of 1881 by 8·73 in.

OUGHTERSHAW, SWARTHGHYLL.—One of the wettest seasons on record, yet a good hay harvest, heavy crops fairly saved. A mild winter, favourable for sheep.

HULL, FULFORD HOUSE.—A very wet year, particularly so in the last quarter, during which 14·08 in. of R fell, the wettest quarter during 25 years. The weather during harvest was very unsettled, but the corn was got in in much better condition than in 1881.

BROUGH, BRANTINGHAMTHORPE.—An excessively wet season, very trying to farmers; low-lands under water in autumn and winter.

COTTINGHAM.—R fell on 53 consecutive days from October 3rd to November 26th; in May there were 10 consecutive days without R, and 10 again in August; the wettest month was December and the driest September.

BEVERLEY.—Great excess of R in the last three months.

THIXENDALE.—January was a singularly mild, fine, and springlike month. T was frequent in May, and some very cold weather occurred early in June, with biting E. wind and S flakes on June 12th.

HUNMANBY, FOXHOLES RECTORY.—January mild; February and March for the most part fine and mild; early part of April fine with cold winds, but heavy R occurred in the latter part; May warmer than usual; June showery until the last few days; August fine and hot in the early part, but very wet in the latter part; September not unfavourable for the harvest, but the crops were very backward, and suffered much from the heavy R in October; November and December both wet and sunless.

AYSGARTH VICARAGE.—Rainfall about 8 in. above the average; very wet autumn; much light R in October and heavy R in November.

SCARBOROUGH.—The rainfall in seven months out of the 12 was below the average, but the total fall is 2·12 in. above the average of 16 years; mean temp. 1°·2 above the average.

DIVISION X.—NORTHERN COUNTIES.

BARNARD CASTLE, WHORLTON.—Early part fine and warm; latter part wet and cold. Good hay crop; harvest spoiled by R.

SEAHAM.—The first half fine, the latter unsettled and wet. Although the fall from April to August (inclusive) was large, it was in the form of T showers, and was consistent with a fair quantity of sunshine, so that the crops were good, and only part (which was caught unharvested by the broken weather in September) suffered damage.

SUNDERLAND, WEST HENDON HOUSE.—The eighth consecutive wet year; the chief characteristic of the rainfall was the frequency of heavy downpours of short duration.

HALTWHISTLE, UNTHANK HALL.—A heavy rainfall for the year, especially during the last three months.

CORBRIDGE, LAUDER GRANGE.—Mean temp. of the year 46°·3.

ROTHBURY, BRENCKBURN PRIORY.—Ungenial, and cloudy during the whole year.

PAWSTON.—January was very dry, no R being registered for 15 consecutive days. The snowstorm early in December was the heaviest for many years, though the cold was not excessive, 5° being the lowest temp. registered.

RAVENGLASS, THE GROVE.—The rainfall of 1882 exceeds by 7 in. that of 1881, yet better crops were raised and secured in 1882.

BRAYSTONES.—Rainfall 6·40 in. above that of 1881, and 4·87 in above the average of 18 years.

ST. BEES, ABBOT'S COURT.—The rainfall of 1882 is the heaviest since 1877, and 2·43 in. above the average of 10 years.

KESWICK, SHU-LE-CROW.—An unusual amount of R, July especially being very wet.

WHITEHAVEN, GILGARRON HALL.—Very wet and sunless; temp. very low all the summer.

COCKERMOUTH, WHINFELL HALL.—Rainfall about 3·7 in. above the average of 26 years.

BASSENTHWAITE, MIREHOUSE.—A very fine spring, but cold ungenial summer; what seems to me remarkable is, that the crops were generally fair, and that although R fell on 26 days in July, and very frequently in August and September, the bulk of the hay was fairly well got.

COCKERMOUTH, BROUGHTON GRANGE.—A larger number of days with small showers occurred than usual, but altogether the rainfall is 3·5 in. above the average; a fair season for all crops; no excessive rains at any time.

PENRITH, FELL LANE.—An unusually wet year, and the quantity of R much more evenly distributed throughout the year than is generally the case.

BLENCOWE SCHOOL.—The year began with heavy rains and sleet, but the earlier months were unusually mild and uniform. Corn was got into the ground in good condition, but the early part of June was wet. July was a dreadful month, R almost continuous. Seed grass was secured in poor condition, and the early hay harvest generally was very tedious. The early part of August made up for lost time, and some excellent work in the field was the result. Corn was cut in prime condition, but the drying season was very slow, some crops being housed very late, and in a wet state. The potato crop was fair, but bad weather interfered with the storage. The great drawback of the year was want of sun and heat. Rainfall slightly above the average.

CARLISLE, WREAY VICARAGE.—Rainfall 3·89 in., and number of rainy days 35, above the average of six years.

ELTERWATER, WOODLANDS.—The wettest year since 1877, and especially wet in the summer, July being the wettest month of the year.

AMBLESIDE.—Total fall above the average, the principal excess being in July, when 11·43 in. fell.

AMBLESIDE, LESKETH HOWE.—Rainfall nearly 6 in. above the average of 14 years.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

LLANFRECHFA GRANGE. — Unusually heavy rainfall and large number of rainy days; severe winds injured fruit in spring, and want of sun, except for about a week, prevented fruit from ripening; autumn so continuously wet that very little autumn wheat could be sown.

TEGFYNYDD.—The greatest rainfall since 1872; no fruit of any kind, and poor crops of corn and turnips.

LLANDILO, GOLDEN GROVE.—Though the year was wet, no flood of any importance occurred on the river Towy.

LLANDOVERY.—Exceedingly wet and very bad for late harvests, several fields of barley on high lands being left to rot on the ground.

HAVERFORDWEST.—January and February were very mild and wet; March was finer and brighter than May. From the 1st of June to the end of the year (except a remarkable week of bright sunshine and heat from August 5th to 12th, which ended in a severe TS,) was one disastrous period of gloom, R and deficiency of sunlight; very stormy, with about a fortnight of severe frost, with S, in December.

ST. DAVID'S.—The first part mild, March and May dry, and the weather favourable for spring sowing; from June onward the season was wet, the hay crops were saved with difficulty, the corn crops were not satisfactory, some portions never ripened, and potatoes were not a success; the latter part of the year was mild.

LLECHRYD, CASTLE MALGWYN.—The year was remarkably wet, the month of July in particular, and consequently the temp. was much lower than usual.

RHAYADER, NANTGWILT.—The heaviest rainfall since 1872, exceeding the average, 1870–79, by 14·10 in.

NEWTOWN, DOLFOR.—Very wet; crops good, but a great quantity spoilt by R, and much rotted on the land.

WELSHPOOL, BUTTINGTON VIC.—Almost continuous R from September 15th to the end of the year; corn on Long Mountain not carried (some not cut) on December 31st. Of the last 106 days of the year it rained on 98.

MOLD, BRYN ALYN.—Rainfall about 7 in. above the average.

ST. ASAPH, NANTLYS.—Total rainfall 4 in. above the average of 16 years, yet fewer floods in the river than for some years, owing to the R being fairly distributed throughout all the months of the year; no dry period.

RUABON, WYNNSTAY.—A comparatively genial spring; a cold, wet, inclement summer; early autumn favourable, late autumn cold and wet; winter cold and wet, almost a continual drip.

ROSSET, TREVALYN HALL.—Rainfall 1·47 in. above the average of 10 years; the wet months were April, June, July, November, and December; in all the remaining months the fall was below the average; temp. was above the mean in the winter and early spring, but the summer was remarkably cool (June very wet and cold), with a max. temp. of only 77°·6 on August 12th; the latter part of the year was almost continuously wet, and a heavy fall of S occurred on December 6th; the last week of the year was extraordinarily mild.

DOUGLAS, VICTORIA ROAD.—Another cold and very wet year, the fourth in succession, the wettest recorded since 1875 except 1877; January, February, and the first half of march, mild; rainfall about the average. On March 19th cold polar wind set in and lasted six weeks; April a cold, wretched, sunless month, with R double the average on 20 days, and the hills thickly covered with S on 15th; May, cold easterly weather to 24th; vegetation extremely backward and much cut by cold winds; from 24th to June 3rd a period of bright, genial weather; the remainder of the month extremely cold. July cold, with excessive R on 24 days. August cold and wet, except from 4th to 11th inclusive—one week of fine, even warm, summer weather. September, an average month; very cold about 20th; harvest for the most part well gathered. Beautiful genial autumn weather prevailed during the first half of October, but the remainder of the month was cold and wet, with strong gales. November very wet, total of R 8·29 in. Excessive R fell for 26 days in December; frequent S.W. gales.

DOUGLAS, CRONKBOURNE.—A mild winter, with about an average fall of R; wet summer; very wet and stormy late autumn.

JERSEY, ST. AUBINS.—The wettest year on record except 1872, rainfall 19 per cent. above the average of seven years; January, February, March, and May were the only dry months. Mean temp. 52°·1, slightly above the average.

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

TEVIOTHEAD MANSE.—Winter open and moist, summer wet; much of the grain not secured till about the second week of Novem-

ber. The S of the early part of December was of almost unprecedented depth, and not a few shepherds narrowly escaped with their lives.

MELROSE, THE ASYLUM.—June, July, and November were very wet months; December was remarkable for the great quantity of S; as nearly as could be told, 26 inches fell in four days, from 4th to 7th, 15 in. of it falling on the latter date; some further small falls followed from 11th to 15th.

MELROSE, ABBEY GATE.—Rainfall 1·94 in. above the average of 10 years; mean temp. 0°·5 above it. In the first three months there were a good many gales, and the temp. was above the average; the summer was favourable to growing crops, but the gathering of cereals was a good deal hindered in autumn by the wet; the yield, however, is good, barley particularly. The year closed with severe frosts and heavy S, more than 24 in. falling on one day.

DIVISION XIII.—SOUTH-EASTERN COUNTIES.

EAST LINTON.—Temp. of the year very variable; January, February, and March far above the average, while April was much below it, destroying the blossom on most of the fruit trees; 16 in. of S fell in December.

DIVISION XIV.—SOUTH-WESTERN COUNTIES.

BIGGAR, CAMBUS WALLACE.—In the autumn months the fall of R was very considerable, and not only so, but there was little continuance of fine weather at any one time, which rendered it most difficult for farmers to secure their crops.

LANARK, RIDGE PARK.—Very little sun and very changeable weather; grain crops good, potatoes badly diseased.

HAMILTON, BOTHWELL CASTLE.—Decidedly more favourable than the two preceding years, for although the rainfall was 4·72 in. above the average, there was more sun; pasture grass excellent, hay crop heavy, but secured with difficulty, as in July there was frequent T, and it rained more or less on 27 days. The grain crops were good, and generally well secured.

BALLANTRAE, GLENDRISHAIG.—Rainfall fully 3 in. below that of 1881, but still above the average; very little S during the year, not more than 3 in. altogether.

GIRVAN, ALMONT.—Rainfall 2·84 in. above the average of six years, and wet days 30 above average; mean temp. 45°·9 slightly below the average; number of frosty days 85.

LOCHWOOD.—Generally mild throughout the year; a heavy gale on January 6th; very little frost and no S during the first three months; summer cold and unpleasant; autumn stormy and wet; severe frost from December 5th to 15th, but little or no S in the West of Scotland.

DIVISION XV.—WEST MIDLAND COUNTIES.

ISLAY, ARDBEG.—Very wet from beginning of July, and consequent late harvest; potato disease worse than usual, the earlier varieties proving an entire failure, turnip crop good, oats an average.

MULL, QUINISH.—The wettest year since observations were commenced in 1875, the rainfall exceeding even that of 1877, by more than an inch.

DIVISION XVI.—EAST MIDLAND COUNTIES.

DUNBLANE, KIPPENROSS GARDENS.—Rainfall considerably above the average.

LANRICK CASTLE.—A very wet year, rainfall 13·35 in. greater than than of 1881.

ARBROATH.—Rainfall nearly 2 in. above the average of 40 years.

DIVISION XVII.—NORTH EASTERN COUNTIES.

FETTERCAIRN.—Weather very changeable throughout the year, an unusual excess of R in April and June, and a fall of 27 in. in the last six months of the year, making the total fall about 10 in. above the average, and the largest since 1872. Very wet, for late harvest, after the 20th of September.

ELLON TILLYDESK.—The first three months remarkably dry, and the last three unusually wet, especially December.

OLD DEER.—The early part of the year very dry and warm, the last three months very wet, with only 14 dry days; crops good.

OLD DEER MANSE.—Autumn unusually wet.

KEITH, H.R.S.—Particularly mild winter, genial summer, but wet harvest time.

CRAIGELLACHIE, ELCHIES.—The early months remarkably genial, but April was cold. Sleet and S fell on June 12th, and the tops of the hills were quite white; T was heard on 12 consecutive days from the 2nd July, but no heavy R fell here. The frost of 14th and 15th December was the most severe for very many years.

FORRES, H.R.S.—Rainfall nearly one-third more than that of any of the four preceding years.

GORDON CASTLE.—Rainfall upwards of 3 in. above the average; crops abundant. December was cold, with much S and R, and intense frost for 12 days in succession, the min. temp. being 10° on 14th; general depth of S, 16 in.

NAIRN, ACHAREIDH.—Rainfall much above the average; September (the harvest month) very wet and unfavourable.

DIVISION XVIII.—NORTH-WESTERN COUNTIES.

LOCHBROOM.—A wet year, rainfall above the average. March was the wettest I ever recorded (10·50 in.); it rained every day. The frost of December is quite unprecedented for severity.

DIVISION XIX.—NORTHERN COUNTIES.

WATTEN, H.R.S.—Beginning of year open and fresh; spring wet; summer mild and wet, with an average amount of sunshine; growth luxuriant. Harvest protracted, owing to wet, and lack of drying winds. Last two months remarkable for the number of days on which R fell.

SHAPINSAY, BALFOUR CASTLE.—Rainfall greatly in excess of that of any other year since observations were commenced in 1856.

IRELAND.

DIVISION XX.—MUNSTER.

CORK, ROYAL INSTITUTION.—Very stormy throughout.

DROMORE CASTLE.—Very wet; an abundant season, but harvest suffered in process of gathering in; 34 more rainy days than the average.

WATERFORD, BROOK LODGE.—Rainfall 4·18 in. above the average of eight years, and number of rainy days 19 above it.

TIPPERARY, HENRY STREET.—A wet summer, a wet autumn (the month of September excepted), and a wet winter, proved disastrous to the small farmers of Ireland. Rainfall about 3 in. above the average of seven years. December was marked by frosts of great intensity.

BALLINA [KILLALOE].—The frequency of R in June and July (50 wet days in the two months), rather than the actual amount of R, had a very damaging effect on all crops.

NENAGH, CASTLE LOUGH.—The wettest year since 1877, both in number of wet days and amount of R; two TSS occurred in May, four in July, and one in August. The summer months were unfavourable, for although the rainfall in June was very small, it fell on 23 days; while July was very wet, R falling on 27 days, and on 18 days in August, chiefly in the latter part of the month. A very violent storm occurred on October 1st, said to have been the worst since 1839.

MILTOWN MALBAY.—January mild; the spring months unusually wet, stormy and cold; May rather dry, but frosty and parching; the summer months rainy, sunless and chilly; October and November wet and very stormy; the beginning of December fair, with sharp frosts, but heavy rain fell towards the end. The greatest hurricane since 1839 occurred on October 1st, doing much damage.

NEWCASTLE WEST.—A bad year, though it opened well, January and February being fine months. March was very severe, and the last half of April so bad that tillage was entirely suspended; May was fine, but June brought H showers and such bitter cold that foliage was destroyed; July had only seven dry days; August had about a fortnight of splendid harvesting weather; September was variable. The end of the year was so bad that farmers had to leave potatoes in the ground till they rotted, and all farm work ceased; farm labourers half starving.

DIVISION XXI.—LEINSTER.

STONEYFORD INISNAG.—January, February and March very fine, mild, and dry; the excess of R occurring in the months of June, July, August, October, and November; very severe frost during the week ending December 15th.

DUBLIN, FITZWILLIAM SQUARE.—Rainfall about 3 in. above the average of 17 years; rainy days 31 above it.

BALBRIGGAN.—Rainfall 2·08 in. above the average of 10 years. The year was wet and cold, with very few hot days; consequently the harvest was late, and below the average.

DIVISION XXII.—CONNAUGHT.

BALLINASLOE, KILCONNELL RECTORY.—A year of excessive moisture and unfavourable weather.

BALLINASLOE, GARBALLY.—Winter very mild, spring and summer cold and cloudy; crops under the average, and in many cases saved with difficulty.

TUAM, GARDENFIELD.—The wettest year since observations commenced in 1866, with the exception of 1872. January and February remarkably mild; March partly very wet; July extremely wet and the R injured the crops; October and November also very wet; on October 1st the greatest storm that has visited this island for many years, great damage done to trees, corn, and houses.

BALLINROBE, KILRUSH.—These wet seasons come in a cycle of 11 years, the following being the dates of bad seasons:—1761, 1772, 1783, 1794, 1805, 1816, 1827, 1838, 1849, 1860, 1871, and 1882.

ARTAMFORD COTTAGE.—Rainfall nearly 10·5 in. above that of 1881, and it fell on 56 more days.

DIVISION XXIII.—ULSTER.

ENNISKILLEN, FLORENCE COURT.—June and July were very wet, and injurious to the crops; spring frosts destroyed the blossoms of fruit trees, consequently garden fruits are very scarce. Cold summer.

CASTLEWELLAN, BANN RESERVOIR.—Rainfall 9·60 in. above the average of the previous 20 years.

BANBRIDGE, MILLTOWN.—Rainfall 6·38 in. above the average of the previous 20 years.

SYDENHAM, ALMA HOUSE.—Total rainfall (45·39 in.) 0·31 in excess of 1881, and no less than 6·13 in. above the average of 16 years.

BELFAST, NEW BARNSLEY.—Early months mild; May was the finest month of the year, the latter half of June, and the whole of July very wet and unfavourable, and August, with the exception of the first 10 days, was much the same; September and October

allowed farmers to get in their corn in fair condition, November was stormy, cold, and wet, and December, with the exception of a frosty period in the second week, very rainy.

BUSHMILLS.—Rainfall 21·5 per cent. above the average of seven years.

LIMAVADY, DRENAGH.—The wettest year since 1877 ; the rainfall of November is the largest amount yet measured in one month.

BELLARENA.—The wettest year since 1877 ; 11 in. of R fell in November and December

COLERAINE.—Rainfall considerably above the average ; the rainfall of November (7·06 in.) is the largest registered in any one month during five years.

MOY, DERRYGALLY.—The summer was wet and not very warm ; 10 days of hard frost occurred from December 5th to 15th. Min. temp. 11° on December 10th.

OMAGH, EDENFEL.—Early months of the year dry and mild ; summer months extremely wet and sunless, the rainfall averaging 5 in. per month, and the rainy days 25. Produce of the earth very deficient.

INVER.—The last four months were miserably cold and wet, the surface of the ground being hardly ever dry.

DONEGAL.—Rainfall above the average, nevertheless by no means a bad year for agriculture. Spring and autumn, on the whole, very favourable.

RAPHOE, CONVOY HOUSE.—Rainfall excessive ; temp. generally low, and the year ungenial.

RAMELTON, KILLYGARVAN.—The year was fine in the early part, but from June to the close the rainfall was large, an unusual quantity falling in November. Mean pressure 29·785 in., mean temp. 46°·2.

HEAVY RAINS IN SHORT PERIODS IN 1882.

WE again have a very brief list of cases of heavy falls of rain in short periods. The table originally computed for *British Rainfall*, 1874, showed that falls of the following intensity might be regarded as sufficiently frequent to be unworthy of special notice :—

Duration of Fall.	Depth.	Rate per hour.	Duration of Fall.	Depth.	Rate per hour.
min.	in.	in.	h. m.	in.	in.
5	·20	2·40	45	·60	·80
10	·30	1·80	1 0	·70	·70
15	·35	1·40	1 15	·75	·60
20	·40	1·20	1 30	·78	·52
25	·44	1·06	1 45	·82	·47
30	·50	1·00	2 0	·83	·42

In 1881 there were only 18 falls reported which exceeded those limits, and in 1882 there were only 15.

As it is not at present known whether these exceptional rains—torrential is not a bad name for them—are equally frequent in all parts of the country, it seems well not to insist rigorously on the above limits, and therefore this year we have inserted 14 returns which are below the limit, and have indicated that fact by affixing an * to each such entry. We are rather in the dark upon this subject, for hitherto we have been unable, from want of time, to work up the materials we possess, but we incline to think that the only falls which can be regarded as exceptional in 1882 are—The Heath House, Cheadle, Staffordshire, 1·00 in. in about 12 minutes, (what a pity Mr. Philips was not at home to record the precise time) ; Dalzell House, Lanarkshire, 1·11 in. in half an hour ; Wick Railway Station, Caithnessshire, 1·73 in. in about one hour and ten minutes.

In North London, heavy falls have been remarkably rare. The Pastorelli storm gauge was not used once during the year, and the

following list contains all the most important details afforded by Casella's self-recording rain gauge :—

Date.	Amount. in.	Duration. in.	Rate per hour. in.
March 1	·08	5	·96
June 9	·06	5	·72
July 8	·12	8	·90
April 23	·10	8	·75
June 4	·16	10	·96
July 10	·20	15	·80
Feb. 14	·14	15	·56

Few of these entries reach half way towards the limit at which values are supposed to become noteworthy.

Heavy Falls in Short Periods in 1882.

Date.	Division.	Station.	Amount.	Duration.		Rate per hour.
			in.	hr.	min.	in.
Sept. 26 ...	VII.	Strelley Hall, Nottingham	·04	...	3	·80*
July 10 ..	XVI.	St. Andrews	·15	...	10	·90*
May 7 ...	IV.	Hillington	·24	...	11	1·32*
,, 3 ...	VI.	Heath House, Cheadle ...	1·00	...	12 ?	5·00
July 6 ...	XI.	Solva	·67	...	15	2·68
Sept. 26 ...	XVI.	Newton Bank, S. Andrews	·23	...	15	·92*
July 24 ...	XVII.	Blackstock, Midmar	·22	...	15	·88*
Sept. 25 ...	X.	Whorlton	·20	...	15	·80*
July 25 ...	IV.	Hillington, Lynn	·80	...	20	2·40
,, 6 ...	X.	St. James's Rd., Carlisle.	·40	...	20	1·20*
Sept. 20 ...	III.	Throcking, Buntingford..	·18	...	20	·54*
June 23 ...	XVII.	Keith, H.R.S.	·46	...	25	1·10
May 22 ...	VI.	Claremont Pl., Cirencester	·15	...	25	·36*
,, 3 ...	,,	Stoke Bliss	·86	...	27 ?	1·91
July 1 ...	V.	Bath	1·90 ?	...	30 ?	3·80 ?
June 29 ...	XIV.	Dalzell House	1·11	...	30	2·22
Aug. 13 ...	XXIII.	Ardtrea, Stewartstown ...	·95	...	30	1·90
July 18 ...	,,	Killygarvan	·50	...	30	1·00
,, 17 ...	XX.	Castle Lough	·50	...	35	·36*
,, 15 ...	VIII.	Macclesfield	·33	...	40	·50*
,, 1 ...	,,	Stretford, Manchester ...	1·01	...	45	1·35
June 3 ...	II.	Wellington College	·65	...	50	·72
Aug. 13 ...	XI.	Port Madoc	·70	1	0	·70
July 6 ...	XIX.	Wick, H.R.S.	1·73	1	10 ?	1·48
Aug. 12 ...	XXIII.	Killygarvan	·75	1	15	·60
April 15 ...	II.	Yapton	1·00	1	30	·67
July 25 ...	VIII.	Highfield, Northwich ..	1·19	2	0	·60
Oct. 16 ...	V.	Bincombe Ho., Crewkerne	1·00	2	0	·50
June 30 ...	VI.	Loughton, Bridgnorth ..	1·30	2	30	·52
Oct. 24 ...	V.	Bincombe Ho., Crewkerne	1·56	3	0	·52
June 4 ...	VI.	Stoke, Coventry	2·01	3	0 ?	·67 ?
Oct, 24 ...	V	Beaminster	1·95	5	0	·39
July 11 ...	IV.	Diss	1·39	5	45	·24
,, 16 ...	VIII.	Newton Heath, Manchestr	2·00	6	0	·33

HEAVY FALLS IN 24 HOURS DURING 1882.

The mode of treating this subject has been so often explained, that it seems needless to say more than that the letter M indicates the maximum fall of rain in any one rainfall day during the year, *i.e.*, in any period of 24 hours ending at 9 a.m. on the day following the date specified.

PART I.—CHRONICLE.

In the volume for 1881 it was given as a rule that no rainfall, was considered worthy of mention in this chronicle of heavy falls, unless at some station the fall reached an amount of 2·00 in., or equalled 6 per cent. of the total fall for the year. The same limits have been adhered to in the present instance, but owing to the (in many parts) extreme wetness of the year, the two different limits do not exhibit much agreement, as at only 40 stations did the fall in any period of 24 hours reach 6 per cent. of the annual total, while falls of 2·00 in. or upwards were registered at 140 stations. Of course this could be equalised by including heavy falls, which were only 5 per cent. instead of stopping at those of 6 per cent. But a fall which is less than 2·00 in., or less than 6 per cent., can scarcely be regarded as worthy of special note.

JANUARY 2ND.

An unimportant M at some ten or a dozen stations in Yorkshire and Mid-Wales, accompanied by a westerly gale.

JANUARY 8TH.

A heavy fall in S. Wales, exceeding 2·00 in. at six stations, the largest being 3·30 in. at Tydraw, Aberdare, but the M at only 13 stations.

JANUARY 28TH AND 29TH.

Falls of S and R occurring on the two days, and causing an unimportant M at 23 stations in the West Midland Counties and N. Wales

on the 28th, and a more important M at 36 stations in Derbyshire and Yorkshire on 29th.

VII.	Stoney Middleton	2·47 in.	5·4 per cent.
IX.	Pately Bridge	2·36 ,,	4·6 ,,
,,	Doncaster (Firsby)	2·35 ,,	7·3 ,,
,,	Sheffield (Ranmoor)	2·18 ,,	4·0 ,,
,,	,, (Nether Edge) ...	2·15 ,,	5·4 ,,
,,	Rotherham (Thrybergh) ...	1·95 ,,	7·0 ,,

FEBRUARY 12TH.

The M at six stations in the Lake district, and at one or two in Scotland; the fall exceeded 2·00 in. at four stations, and at Wythburn 4·44 in. was registered.

FEBRUARY 25TH.

The M at about three-fourths of the stations in Westmoreland, and at five stations in Cumberland. The fall exceeded 2 in. at nine stations, but owing to the wetness of the district the percentages are small; 3·27 in. fell at Patterdale Hall.

APRIL 13TH.

Heavy R with thunderstorms and gales in different parts of the country; the M at 20 stations mostly in the N.E. of England, the E. and N.E. of Scotland.

XVI.	Culross (West Grange) ...	2·23 in.	4·4 per cent.
,,	Broughty Ferry.....	2·75 ,,	7·4 ,,
,,	Dundee (E. Necropolis) ...	2·65 ,,	7·8 ,,
,,	Kilconquhar (Balcarres) ...	2·10 ,,	5·1 ,,

APRIL 14TH.

The M at 16 stations, mostly in Lancashire, but at none of them was it important.

APRIL 25TH.

A widely-distributed fall over the dry districts of the S.E. and E. of England; although it was the M at 79 stations, no fall of 2 in. was recorded.

APRIL 29TH.

The M at 38 stations distributed over the West Midland Counties, Cheshire, Lancashire, North Yorkshire, and Wales.

IX. Fylingdales Moor..... 2·62 in. 6·7 per cent.

MAY 24TH.

A heavy fall in a wet district; the M at eight stations in Cumberland and Westmoreland, and at five stations in Central Ireland.

X.	Seathwaite	4·51 in.	3·0 per cent.
,,	Loweswater (Waterend) ...	2·50 ,,	4·5 ,,
,,	Cockermouth (Brandlingill)	2.08 ,,	3·6 ,,
,,	,, (Whinfell Hall)	2·01 ,,	3·5 ,,

JUNE 22ND.

The M at all 47 stations, nearly all in the midland and northern counties of England; at only six stations did it exceed 5 per cent. of the total for the year

III. Banbury (High Street)..... 2·04 in. or 5·1 per cent.

JULY 6TH.

An unimportant M at 20 stations, mostly in Lancashire, the fall exceeding 2 in. at only two stations.

JULY 11TH.

A steady R, with T and L in many parts of the country; the M at 82 stations, distributed over the whole of England South of the Humber and north of London. The fall exceeded 2·00 in. at 15 stations.

VI.	Berkeley	2·89 in.	or 7·5 per cent.
III.	Hargrave.....	2·82 ,,	8·4 ,,
IV.	Stradbroke.....	2·61 ,,	7·1 ,,
III.	Weedon, Floore.....	2·49 ,,	6·9 ,,
,,	,,	2·35 ,,	6·7 ,,
VI.	West Malvern	2·30 ,,	5·9 ,,
,,	Edge Hill House	2·28 ,,	4·8 ,,
,,	Cirencester, Claremont Pl.	2·25 ,,	4·9 ,,

AUGUST 22ND.

The M at 35 stations, in two comparatively dry districts, one in Northumberland, and the other in the N.E. of Ireland.

X.	Bothalhaugh	2·80 in.	or 9·1 per cent.
,,	Cramlington	2·19 ,,	7·0 ,,
,,	N. Shields	2·04 ,,	6·6 ,,
,,	Morpeth (Meldon Park) ...	2·00 ,,	6·2 ,,
,,	Wellburn, Jesmond	1·95 ,,	6·1 ,,
,,	N. Shields (Low Lights) ...	1·92 ,,	6·3 ,,
,,	,, (Clementhorpe).	1·92 ,,	6·5 ,,
,,	Tynemouth (Pier Works).	1·80 ,,	6·4 ,,
XXIII.	Newcastle (Fairleigh)	2·80 ,,	4·8 ,,
,,	Newry	2·40 ,,	5·5 ,,
,,	Kilkeel.....	2·35 ,,	6·0 ,,

SEPTEMBER 14TH.

Thunderstorm rains causing the M at 11 stations, mostly in the northern portion of Scotland.

XVII.	Forres, H.R.S.	2·60 in.	or 8·4 per cent.
XVIII.	Cawdor [Nairn]	2·40 ,,	6·9 ,,

OCTOBER.

During the latter part of the month of October, the rainfall was very heavy, occurring as steady heavy R, rather than in torrential downpours, so that although the M at 505 stations occurred during the month, they were distributed over 18 days, and the individual falls were not, as a rule, large. Some notes on the resultant floods will be found on pages [21] and [22].

OCTOBER 15TH.

M at 70 stations, mostly in Divisions II. and V.

V.	Salisbury (West Dean)	2·66 in.	or 6·1 per cent.
,,	Landford	2·57 ,,	7·3 ,,
II.	Worthing	2·55 ,,	7·9 ,,
V.	Hollacombe	2·25 ,,	5·3 ,,
,,	Salisbury (Wilton)	2·23 ,,	5·7 ,,
II.	Worthing.....	2·11 ,,	6·4 ,,
,,	Romsey (Michelmersh).....	2·07 ,,	5·9 ,,

OCTOBER 16TH.

M at 52 stations in the same districts as on the previous day.

V.	Crewkerne (Bincombe House)	2·69 in.	or 5·8 per cent.
,,	,, (Seaborough) ...	2·52 ,,	5·7 ,,
,,	Wimborne...	2·26 ,,	5·1 ,,

OCTOBER 18TH.

M at 20 stations in Ireland.

XX.	Kenmare (Derreen)	4·28 in.	or 5·7 per cent.
XXII.	Clifden (Kylemore)	2·78 ,,	3·2 ,,
XXIII.	Castlewellan (Lough Island)	2·70 ,,	5·2 ,,
XX.	Fermoy (Glenville)	2·60 ,,	4·7 ,,
,,	Portlaw (Mayfield)	2·37 ,,	4·7 ,,
,,	Cork (Blackrock).....	2·22 ,,	4·4 ,,
,,	Fermoy (Gas Works).....	2·20 ,,	5·5 ,,

OCTOBER 23RD.

M at 90 stations, mostly in Divisions V. and XI.; only four stasions registered amounts exceeding 2 in., the largest being 2·35 in. at Cogan, Cardiff.

OCTOBER 24TH.

M at 150 stations, spread almost all over England and over part of Wales; largest fall 2·43 in., at Bittal Reservoir, Bromsgrove.

NOVEMBER 5TH.

The M at four stations in Wales, the amounts being small except at Rhiwbryfdir, where 3·84 in. fell.

DECEMBER 6TH AND 7TH.

The great snowstorm in the north yielded the M at 25 stations, three of them being in Lancashire, two in Scotland, and the remaining 20 in Yorkshire. Some doubt attaches to all measurements of the amount of S, but the following quantities are believed to be substantially correct :—

IX.	Leeds (Weetwood Res.)	2·54 in.	7·3 per cent.
,,	Huddersfield Cemetery.....	2·21 ,,	5·6 ,,
VIII.	Manchester (Newton Heath) ...	2·20 ,,	4·3 ,,

The S yielded a M also at six stations in Scotland on the following day (7th), 2·50 in. or 8·7 per cent. being recorded at Sunnyside, Jedburgh; 2·43 in. or 6·1 per cent. being recorded at Abbey Gate, Melrose, and 2·01 in. or 5·2 per cent. at Galashiels.

PART II.—ABSTRACT.

The results given in this part of the work are dependent on two factors: (1) on the frequency and intensity of torrential R, and (2) on the general wetness or dryness of the year.

It is obvious that a given heavy fall, say 2½ in. is a higher percentage of, say 25 in. than of 35 in. Therefore, the greater the wetness of any year, the less will be the percentages, unless the heavy falls are themselves also above the average.

No fewer that 1463 records have been abstracted as the basis of the following tables.

In Table I. are given the 16 cases of greatest falls, in the rainfall day, during 1882. They are considerably smaller than usual, for only three exceed 4 in., and only seven are above 3 in.

Table II. gives an abstract of Table I., and enables it to be compared with similar ones for 17 previous years. This shows most

plainly that torrential rains were rare in 1882, for the mean of the 16 highest daily amounts is not only 0·28 in. below the average, but it is the lowest since 1873. Further proof of this point is afforded by the fact that this list of heavy falls, is largely formed of records from extremely wet stations, (where of course returns of 2 or 3 inches in 24 hours are quite common). This is proved by the average yearly total at the 16 stations being above 84 in., about 19 in. above the average, and higher than in any of the previous 17 years exeepting 1866, 1874, and 1877.

The year having been a wet one, and heavy rains rare, the percentages are necessarily low, both causes acting in the same direction, and thus we find both from Table III., and from the abstract of it in Table IV., that the percentages are very low. They are with one exception (1876) the lowest during 18 years, and about $\frac{1}{6}$th less than usual.

Table V. gives the mean result from upwards of 1400 stations, and confirms the remarks previously made. The average percentage, instead of being 4·4, which is the mean of 17 years, was only 3·6, which is the lowest in any year except 1872, when the exceptionally large total rainfall dwarfed the heavy falls. But the mean *amount* of maximum falls, *i.e.*, the average fall in the wettest day of the year at all stations is not unprecedentedly small; it is below the average, but it was less in 1870, 1873, and 1874.

Therefore, the final result is, that heavy falls were rather more rare than usual, and as the rainfall of the year was large, the percentage of the yearly total falling on any one day was exceptionally small.

TABLE I.—*Maximum Falls in* 1882.

Date.	Div.	Stations.	Depth.	Per Cent.	Fall in year
May 24 ...	X.	Seathwaite	4·51in.	3·0	149·69 in.
Feb. 12 ...	,,	Wythburn Vicarage.....	4·44 ,,	3·8	115·92 ,,
Oct. 18 ...	XX.	Kenmare (Derreen)	4·28 ,,	5·7	74·57 ,,
Nov. 5 ...	XI.	Rhiwbryfdir	3·84 ,,	2·8	136·55 ,,
Jan. 8 ...	,,	Aberdare (Ty Draw)	3·30 ,,	2·6	128·93 ,,
Feb. 25 ...	X.	Patterdale Hall	3·27 ,,	3·3	100·47 ,,
March 8 ...	XVIII.	Fort William (Public School)	3·27 ,,	3·7	89·55 ,,
Feb. 27 ...	XI.	Trawsfynydd.....	3·00 ,,	3·6	83·27 ,,
July 11 ...	VI.	Berkeley (Salter Street)	2·89 ,,	7·5	38·32 ,,
,, 14 ...	XI.	Tredegar (Ebbw Vale).....	2·84 ,,	3·7	76·01 ,,
,, 11 ..	III.	Thrapstone (Hargrave)	2·82 ,,	8·4	33·53 ,,
Aug. 28 ...	VIII.	Garstang (Calder Mount) ...	2·82 ,,	4·7	60·13 ,,
Feb. 12 ...	X.	Windermere	2·82 ,,	3·7	75·30 ,,
,, 25 ...	,,	Elterwater (Woodlands)	2·81 ,,	2·9	95·84 ,,
Aug. 22 ...	,,	Morpeth (Bothalhaugh)	2·80 ,,	9·1	30·61 ,,
,, 22 .	XXIII.	Newcastle (Fairleigh).....	2·80 ,,	4·7	59·25 ,,

TABLE II.—*Comparison of Maximum Falls with those in previous years.*

	MEAN.			ABSOLUTE.			
Years.	Depth.	Per Cent.	Mean total fall at thes e stations.	Depth.	Per Cent.	Station.	Division.
	in.		in.	in.			
1865 ...	3·67	6·4	61·8	6·41	5·5	Seathwaite.....	X.
1866 ...	3·40	4·4	86·2	6·38	3·6	Seathwaite.....	,,
1867 ...	3·17	9·0	42·5	4·78	17·7	Hartlip	II.
1868 ...	3·32	6·1	65·9	5·60	4·8	Camusinas.....	XV.
1869 ...	3·68	5·0	77·7	6·70	4·5	Seathwaite.....	X.
1870 ...	3·20	7·5	43·8	6·00	17·1	Tongue	XIX.
1871 ...	3·08	5·7	61·6	4·24	9·6	Melbury.....	V.
1872 ...	4·10	6·6	73·1	5·82	3·2	Seathwaite.....	X.
1873 ...	2·97	6·2	60·7	4·20	2·9	Seathwaite.....	,,
1874 ...	3·96	4·6	86·5	5·32	4·4	Bryn Gwynant	XI.
1875 ...	4·52	7·8	63·9	5·33	9·7	NewportW.W.	,,
1876 ...	3·37	5·9	57·6	4·50	5·5	Foffany	XXIII.
1877 ...	3·77	4·6	93·4	4·98	5·3	Skye, Portree..	XVIII.
1878 ...	3·57	7·4	57·2	4·24	8·6	Springfield ...	XI.
1879 ...	3·66	9·5	50·4	4·05	4·1	Little Langdale	X.
1880 ...	3·50	7·7	51·1	4·75	3·9	Seathwaite.....	,,
1881 ...	3·65	4·9	83·1	5·42	4·7	Sligachan	XVIII.
Mean ...	3·56	6·4	65·7	5·22	6·8	.....	...
1882 ...	3·28	4·5	84·3	4·51	3·0	Seathwaite ...	X.
Diff. ...	— ·28	—1·9	+18·6	— ·71	—3·8	.....	...

TABLE III.—*Maximum Per-Centages in* 1882.

Date.	Div.	Station.	Per Cent.	Depth.	Fall in year.
Aug. 22 ...	X.	Morpeth (Bothalhaugh)	9·1	2·80 in.	30·61 in.
Dec. 7 ...	XII.	Jedburgh (Sunnyside).....	8·7	2·50 ,,	28·70 ,,
July 11 ...	III.	Thrapstone (Hargrave)	8·4	2·82 ,,	33·53 ,,
Sept 14 ...	XVII.	Forres, H.R.S.	8·3	2·60 ,,	31·14 ,,
Oct. 15 ...	II.	Worthing (Bedford Row) ...	7·9	2·55 ,,	32·35 ,,
April 13 ...	XVI.	Dundee (Eastern Necropolis)	7·8	2·65 ,,	34·10 ,,
July 11 ...	VI.	Berkeley (Salter Street)	7·5	2·89 ,,	38·32 ,,
April 13 ...	XVI.	Broughty Ferry (Douglas Ho.)	7·5	2·75 ,,	36·65 ,,
Oct. 15 ...	V.	Landford	7·3	2·57 ,,	35·29 ,,
Jan. 29 ...	IX.	Doncaster (Firsby)	7·3	2·35 ,,	32·13 ,,
Dec. 6 ...	,,	Leeds (Weetwood Res.)	7·3	2·54 ,,	34·88 ,,
July 11 ...	IV.	Stradbroke	7·1	2·61 ,,	36·61 ,,
Aug. 22 ...	X.	Cramlington	7·0	2·19 ,,	31·24 ,,
July 11 ...	III.	Weedon (Floore)	6·9	2·49 ,,	36·03 ,,
Jan. 29 ...	IX.	Rotherham (Thrybergh).....	6·9	1·95 ,,	28·06 ,,
Sep. 17 ...	XVIII.	Cawdor [Nairn]	6·8	2·40 ,,	35·39 ,,

TABLE IV.—*Comparison of Maximum Per-Centages with those in previous years.*

	MEAN.			ABSOLUTE.			
Years.	Per Cent.	Depth.	Mean total fall at these Stations.	Per Cent.	Depth.	Station.	Division.
		in.	in.		in.		
1865 ...	9·9	2·62	28·4	13·0	4·40	Fleckney.....	VII.
1866 ...	8·1	2·31	29·3	10·0	2·48	Burton	VI.
1867 ...	11·0	2·85	25·3	17·7	4·78	Hartlip	II.
1868 ...	8·6	2·55	30·1	11·0	4·00	Tongue	XIX.
1869 ...	7·9	2·17	27·9	10·0	3·40	Tillydesk	XVII.
1870 ...	10·0	2·34	22·9	17·1	6·00	Tongue	XIX.
1871 ...	9·0	2·43	26·8	11·5	3·62	Warter	IX.
1872 ...	8·1	3·43	42·5	10·0	3·70	Hillington Hall	IV.
1873 ...	9·7	2·39	24·7	11·8	2·77	Oscott	VI.
1874 ...	9·2	2·16	23·7	11·9	2·50	Welwyn.. [Hall	III.
1875 ...	10·2	3·76	37·5	13·2	3·95	Letheringsett	IV.
1876 ...	7·4	2·49	33·7	8·5	3·70	Cragside	X.
1877 ...	8·2	2·73	33·1	9·3	3·09	Wellington.....	VI.
1878 ...	10·2	3·05	30·0	11·8	3·90	Haverstock Hill	I.
1879 ...	10·9	3·31	30·5	12·3	3·80	Cambridge M.V.	III.
1880 ...	9·5	3·06	32·3	11·7	3·34	Marmont Pr. L.	III.
1881 ...	8·1	2·42	30·3	10·6	3·20	Aboyne Castle..	XVII.
Mean..	9·2	2·71	29·9	11·8	3·68	.....	...
1882 ...	7·7	2·54	33·4	9·1	2·80	Bothalhaugh ...	X.
Diff. ...	—1·5	— ·17	+ 3·5	—2·7	— ·88	.....	...

TABLE V.—*Comparison of the Mean of all the Maximum Falls in 1882 with similar data for previous years.*

Years.	Number of Returns.	Mean Percentage.	Mean Amount.	Mean Total Fall in year.	1867 being assumed =100.	Total Fall being assumed =34in. Mean Max. =
			in.	in.		
1865.....	481	5·1	1·70	33	106	5·00 per cnt
1866.....	590	3·7	1·48	40	129	4·35 ,,
1867.....	584	4·6	1·44	31	100	4·24 ,,
1868.....	676	4·3	1·43	33	106	4·21 ,,
1869.....	637	4·2	1·42	34	108	4·18 ,,
1870.....	687	4·9	1·30	27	81	3·82 ,,
1871.....	752	4·9	1·49	30	98	4·38 ,,
1872.....	743	3·4	1·59	47	151	4·68 ,,
1873.....	809	4·6	1·35	29	94	3·97 ,,
1874.....	1010	4·4	1·41	32	103	4·15 ,,
1875.....	1081	5·0	1·83	37	119	5·38 ,,
1876.....	1112	3·9	1·49	38	123	4·38 ,,
1877.....	1180	3·8	1·56	41	132	4·59 ,,
1878.....	1186	4·3	1·49	35	113	4·38 ,,
1879.....	978	4·2	1·52	36	116	4·47 ,,
1880.....	1117	4·8	1·72	36	116	4·41 ,,
1881.....	1194	4·1	1·45	35	113	4·27 ,,
Mean ...	872	4·4	1·51	35	112	4·40 ,,
1882.....	1463	3·6	1·42	39	126	4·18 ,,
Diff.....	+591	— ·8	— ·09	+ 4	+ 14	— ·22 ,,

MONTHLY RAINFALL OF 1882.

OUR description of the monthly fall of rain takes at present four forms—that of the observers' notes on pages [28] to [85], a series of tables, a series of maps, and a brief summary.

TABLES.

As regards the tables, which immediately follow this note, they give the fall in each month of 1882, at more than 200 stations, selected in consequence of their fulfilling various conditions: (1) Equable geographical distribution over all parts of the British Isles; (2) Being well kept registers, of gauges in good positions, and not very high above the ground; (3) Being stations the results of which have been published in previous years. Of course, all do not fulfil the whole of these conditions, but the great majority do, and they undergo careful revision yearly, in accordance with the above principles.

MAPS.

"For the construction of these, 45 stations were chosen, for each of which the monthly mean was determined for each month from the observations made during the decade, 1870-79. Then a table was constructed, showing for each station whether the fall in each month of 1882 was within one inch of the average, or more than an inch above or below it. Upon the map for each month were then placed marks, over the site of each station, indicative of the relation of the fall in that month to the average. The symbols adopted are: When within an inch of the average a round dot, when more than an inch above it a +, and when more than an inch below it a —"

MONTHLY RAINFALL AT 231 STATIONS IN THE BRITISH ISLES DURING 1882.

ENGLAND.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
I.	Middlesex	London (Camden Sq.)	1·30	1·30	1·35	2·83	1·20	2·30	2·95	1·48	2·39	4·96	2·57	2·51	27·14
,,	,,	Uxbridge (Harefield)	1·35	·87	1·72	3·53	2·15	2·82	2·20	1·53	2·64	6·10	3·28	2·33	31·02
II.	Surrey	Guildford (Guildown)	1·13	1·45	·62	3·67	1·43	2·44	2·42	1·30	2·51	5·29	2·31	2·40	26·97
,,	Kent	Tenterden	1·20	1·69	1·31	2·85	1·65	2·69	3·00	2·53	3·36	6·60	3·46	2·50	32·84
,,	,,	Hythe	1·08	·88	1·95	2·83	1·34	1·93	2·45	1·59	3·71	6·09	4·16	3·09	31·10
,,	,,	Seven Oaks (River Hill)	1·10	1·59	1·06	2·48	·92	3·31	2·60	1·31	2·95	5·81	2·94	2·43	28·50
,,	,,	Faversham (Ospringe)	1·25	1·18	1·32	3·00	1·31	3·31	2·99	1·56	3·73	7·10	2·77	2·47	31·99
,,	Sussex	Worthing	1·51	1·43	1·01	2·24	1·19	2·53	2·57	2·03	2·69	8·46	3·81	2·88	32·35
,,	,,	Maresfield (Forest Lodge)	1·70	1·95	1·48	3·54	1·08	2·68	3·58	2·00	3·05	7·75	4·30	3·28	36·39
,,	Hants	I. of Wight (St. Lawrence)	1·45	1·13	·79	3·30	1·00	2·28	2·83	2·01	2·62	8·14	4·02	3·16	32·73
,,	,,	Droxford	1·95	2·00	·78	3·66	1·78	3·59	3·75	1·96	2·27	6·91	4·32	3·13	36·10
,,	,,	Basingstoke (Sherborne)	1·90	2·00	1·39	3·47	1·51	2·36	2·44	1·80	2·88	5·95	4·02	2·84	32·56
,,	Berks	Newbury (Welford)	1·67	2·05	1·58	4·95	2·17	3·57	3·06	2·50	2·64	7·15	4·36	3·53	39·23
III.	Herts	Hertford (Bayfordbury)	1·16	1·45	1·39	3·24	1·44	1·69	1·57	1·56	2·48	5·54	3·26	2·86	27·64
,,	,,	Royston	1·17	1·76	1·23	2·91	1·04	2·28	1·92	1·12	1·69	5·20	3·22	2·67	26·21
,,	Bucks	High Wycombe	1·22	1·50	1·38	3·42	1·63	3·12	2·03	1·51	2·38	5·81	3·13	3·54	30·67
,,	,,	Buckingham (Adstock)	1·50	1·97	1·13	3·97	2·26	3·05	3·44	1·67	2·56	6·08	4·19	3·21	35·03
,,	Oxford	Oxford	1·15	1·75	1·18	3·78	1·66	3·08	3·56	1·36	2·08	5·59	3·42	3·20	31·81
,,	Northampton	Wellingborough	1·64	1·80	1·55	3·30	2·17	3·11	4·39	1·85	3·76	5·24	3·78	3·57	36·16
,,	Bedford	Bedford	1·45	1·60	1·10	3·00	1·23	2·20	3·57	1·75	2·07	5·10	3·20	2·15	28·42
,,	Cambridge	Ely (Stretham)	1·33	1·19	1·54	2·59	1·16	2·26	2·59	1·98	2·63	5·17	2·24	2·14	26·82
,,	,,	Wisbech	1·17	1·41	1·11	2·69	1·18	2·32	2·41	1·99	2·20	6·34	3·12	3·62	29·56
IV.	Essex	Waltham Abbey	1·16	·85	1·35	2·71	1·21	2·03	1·47	1·57	2·66	5·08	2·38	2·68	25·15
,,	,,	Chelmsford	·94	1·05	·97	2·32	1·14	2·20	2·96	1·77	2·57	5·60	2·80	2·76	27·08
,,	,,	Braintree (Bocking Place)	1·42	1·24	1·43	3·20	1·35	3·36	2·72	2·19	3·05	5·42	3·03	3·07	31·48
,,	Suffolk	Hadleigh Boxford	1·11	1·18	1·28	2·58	1·79	2·44	3·25	2·62	2·61	4·28	2·42	2·86	28·42
,,	,,	Ipswich	1·25	1·29	1·31	3·25	1·83	2·44	2·63	1·91	2·87	4·55	2·82	3·33	29·48
,,	,,	Saxmundham	1·44	1·67	1·81	3·78	1·44	2·30	2·91	2·28	3·20	6·57	3·25	3·53	34·18
,,	Norfolk	Geldeston [Beccles]	1·34	1·65	1·36	2·74	1·51	2·77	2·57	1·52	2·57	5·74	3·13	3·80	30·70
,,	,,	Swaffham	1·74	1·65	1·41	3·03	1·71	4·98	3·04	2·37	3·01	4·65	3·32	3·90	34·81
,,	,,	Holt	1·89	1·76	1·30	2·41	1·82	3·38	2·63	1·68	2·50	4·64	3·97	3·59	31·57

ENGLAND—(*continued.*)

D.V.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
V.	Wilts	Salisbury	1·28	1·87	·87	3·96	2·10	3·74	3·43	1·47	2·88	6·57	3·65	2·85	34·67
,,	,,	Trowbridge(SteepleAshton)	1·15	1·70	1·46	3·92	1·45	4·11	2·89	2·52	2·70	5·59	3·27	2·71	33·47
,,	,,	Pewsey	1·27	1·97	1·89	4·38	3·21	4·86	2·44	2·45	2·52	5·80	3·59	3·15	37·53
,,	Dorset	Weymouth (Osmington)	1·74	2·28	1·08	4·28	1·85	3·75	3·07	2·58	2·73	8·54	4·50	4·30	40·70
,,	,,	Wimborne (Chalbury)	1·14	1·55	·44	5·07	2·10	3·46	2·86	1·81	2·60	7·20	3·83	2·86	34·92
,,	,,	Shaftesbury	1·93	1·87	1·37	4·59	2·15	4·33	4·10	2·48	3·94	8·28	5·59	4·19	44·82
,,	Devon	Kingsbridge	2·93	2·65	2·04	7·10	1·55	4·51	4·54	3·56	5·04	8·65	6·16	6·78	55·51
,,	,,	Dartmoor (Lee Moor)	3·90	4·14	2·84	8·61	2·05	6·24	7·44	6·16	6·21	9·10	7·30	10·57	74·56
,,	,,	Bovey Tracey	2·27	3·36	1·57	7·02	2·17	3·79	5·03	2·81	4·29	7·24	5·63	5·54	50·72
,,	,,	Cullompton (Bradninch)	1·70	1·90	1·31	4·79	1·57	5·20	4·58	3·26	3·43	6·88	5·05	5·68	45·35
,,	,,	S. Molton (Rose Ash)	3·14	2·06	2·12	4·62	1·53	5·16	5·61	5·25	3·84	6·20	6·51	6·67	52·71
,,	Cornwall	Penzance	3·63	4·04	1·34	5·66	1·33	4·20	5·15	4·03	4·37	6·94	7·45	10·98	59·12
,,	,,	St. Agnes	2·56	3·15	1·55	5·49	1·42	4·25	4·71	2·83	3·70	5·60	5·02	7·02	47·30
,,	,,	Stratton (Week St. Mary)	2·61	3·07	1·30	4·80	2·84	3·59	4·83	4·77	4·82	5·84	5·25	6·71	50·43
,,	Somerset	Ilminster	1·62	2·54	1·56	5·11	1·71	4·11	4·74	2·23	3·10	7·45	4·16	3·62	41·95
,,	,,	Glastonbury (Street)	1·45	1·77	1·73	4·28	1·17	3·30	4·56	2·76	3·23	6·08	3·65	3·87	37·85
,,	,,	Exford Rectory	4·63	3·04	2·83	5·71	2·90	5·26	7·75	6·84	4·95	10·71	8·60	7·96	71·18
VI.	Gloucester	Clifton	2·72	2·44	2·29	4·07	1·93	3·37	6·18	5·18	2·70	7·13	5·82	4·45	48·28
,,	,,	Stroud (Upfield)	2·21	2·88	1·42	3·73	2·33	3·04	5·44	2·60	4·94	6·11	4·17	3·31	42·15
,,	,,	Fairford (Hatherop Rec.)	1·88	2·35	1·92	3·68	1·98	3·69	3·86	2·64	3·15	7·16	4·36	3·58	40·25
,,	Hereford	Ross (The Graig)	2·99	3·12	1·04	3·49	2·01	2·51	4·63	2·37	3·02	5·80	3·82	3·60	38·40
,,	Salop	Ch. Stretton (Woolstaston)	3·17	3·27	2·62	2·92	2·26	4·13	4·09	2·64	2·74	5·46	5·20	3·34	41·84
,,	,,	Wellington	2·43	2·37	1·65	2·82	1·45	3·87	4·85	2·36	1·84	4·80	4·05	3·34	35·83
,,	,,	Oswestry	3·43	2·38	2·28	4·00	1·78	3·78	4·40	2·93	2·47	5·08	5·36	4·30	42·19
,,	Stafford	Tamworth	2·34	2·23	1·69	2·94	3·29	4·96	3·67	1·89	2·79	6·05	3·99	4·84	40·68
,,	,,	Burton (Shobnall)	2·38	1·43	1·89	3·26	2·51	4·77	3·12	1·55	2·05	5·19	3·61	4·74	36·50
,,	,,	Stoke (Barlaston)	2·43	2·57	2·65	4·28	1·62	5·59	4·01	3·69	2·56	5·03	6·16	5·86	46·45
,,	Worcester	Blockley	1·69	2·64	1·29	3·86	2·14	3·33	3·86	2·03	3·83	6·69	4·65	3·17	39·18
,,	,,	Malvern	2·31	3·00	1·32	4·60	2·13	3·15	5·39	2·72	3·13	5·35	4·42	3·35	40·87
,,	,,	Tenbury (Orleton)	2·57	3·41	1·23	3·74	2·87	4·77	3·50	2·55	3·14	5·76	3·99	3·18	40·71
,,	,,	Stourbridge (Longlands)	2·15	2·78	1·21	4·30	2·88	5·31	3·42	2·22	2·03	5·66	3·93	3·18	39·07
,,	Warwick	Leamington (Blackdown)	2·21	1·90	1·52	2·83	1·89	3·54	3·62	1·76	3·40	5·30	4·25	3·36	35·58
,,	,,	Willey Rectory	2·12	1·92	1·46	3·15	1·80	4·44	3·19	1·81	2·95	5·78	4·02	3·49	36·13
VII.	Leicester	Loughborough	2·31	2·34	1·77	2·89	1·79	4·30	4·37	2·19	2·29	5·96	3·21	5·25	38·67
,,	,,	Harston [Grantham]	2·04	1·92	1·59	3·02	2·05	3·95	2·82	2·57	2·65	5·56	3·55	4·73	36·45

ENGLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
VII.	Rutland	Market Overton	2·04	2·04	1·11	3·49	1·87	3·49	3·39	2·33	3·12	5·66	3·52	4·30	36·36
,,	Lincoln	Horncastle	1·91	1·60	1·35	3·13	1·78	3·92	2·14	3·99	2·50	4·95	3·27	1·95	32·49
,,	,,	Brigg (Appleby Vic.)	1·76	1·52	1·38	3·36	2·48	4·40	2·00	3·36	1·80	5·37	3·17	4·48	35·08
,,	Notts	Ollerton(Thorsby Gardens)	2·80	1·75	1·07	2·83	2·37	3·78	2·86	2·33	2·58	4·75	3·50	4·43	35·05
,,	Derby	Buxton	4·25	4·39	3·73	5·34	2·37	8·42	6·67	5·51	2·88	5·95	9·24	7·11	65·86
VIII.	Cheshire	Congleton(Buglawton Vic.)	2·31	2·40	1·96	3·10	1·12	5·51	4·99	4·75	2·72	3·71	5·33	5·00	42·90
,,	Lancashire	Manchester (Withington)	2·58	2·46	2·04	3·67	1·36	6·33	5·20	2·65	2·23	3·21	5·14	4·83	41·70
,,	,,	Ormskirk (Rufford)	2·55	1·68	2·84	3·96	1·91	4·61	5·31	3·30	2·53	2·70	5·12	3·14	39·65
,,	,,	Burnley (Rose Grove)	3·78	2·79	3·71	5·27	1·93	6·13	6·70	4·06	2·12	4·00	7·30	4·54	52·33
,,	,,	Garstang (Vale House)	3·70	2·52	3·66	4·90	2·11	4·35	7·31	5·27	2·72	5·25	5·77	3·27	50·83
,,	,,	Grange (Nutwood)	3·24	3·59	3·87	4·37	2·36	4·17	4·87	5·18	2·90	3·88	6·57	3·19	48·19
IX.	York, W.R.	Rotherham	3 34	1·66	1·43	3·57	2·02	3·60	3·23	1·91	2·17	5·13	3·14	3·61	34·81
,,	,,	Huddersfield (Dalton)	3·90	2·41	2·37	4·40	1·13	4·06	3·00	1·68	1·64	3·69	4·74	4·22	37·24
,,	,,	South Milford	1·87	1·84	1·74	4·14	1·56	4·68	3·18	1·94	1·74	4·70	2·89	4·05	34·33
,,	,,	PateleyBridge(CastleStead)	5·71	2·91	3·82	5·63	1·47	4·16	4·94	2·52	2·56	4·95	6·60	6·26	51·53
,,	,,	Malham Tarn	5·20	5·03	6·33	6·69	2·57	7·32	10·39	5·54	3·69	5·18	8·19	6·90	73·03
,,	York, E.R.	Patrington	1·74	1·22	1·22	3·47	1·86	3·04	2·52	3·64	1·65	5·26	3·12	4·66	33·40
,,	,,	Brantinghamthorpe	2·75	1·32	2·18	4·25	1·52	4·60	2·80	3·74	1·59	6·25	3·02	6·73	40·75
,,	,,	Pocklington (Warter)	2·56	1·83	2·22	5·29	1·94	4·84	3·96	2·80	1·34	5·05	3·65	4·66	40·14
,,	,,	Ganton	2·76	1·94	1·67	3·73	1·20	3·18	3·99	2·66	1·13	5·27	3·63	4·25	35·41
,,	York, N.R.	Northallerton	·88	·57	2·08	4·41	1·43	4·16	4·02	3·17	1·99	3·14	2·57	2·84	31·26
,,	,,	Lockwood Beck	1·51	1·28	2·76	5·09	1·13	4·28	2·73	3·63	1·77	5·02	5·06	4·08	38·34
X.	Durham	Darlington (South End)	1·06	·71	1·84	4·50	1·93	4·98	4·14	2·56	2·50	3·73	3·06	4·70	35·71
,,	,,	Hartlepool(HurworthBurn)	·78	·34	2·06	4·00	2·54	3·35	2·84	2·39	2·20	4·77	2·94	4·38	32·59
,,	,,	Wolsingham	1·63	2·04	3·09	4·55	1·56	4·39	3·54	2·36	2·60	5·45	4·63	5·89	41·73
,,	Northumberland	Haltwhistle(UnthankHall)	2·78	3·53	3·69	3·23	1·55	6·71	4·60	2·96	1·74	3·87	4·86	3·67	43·19
,,	,,	Stamfordham	·94	·78	2·01	2·69	1·94	4·14	3·05	2·76	1·87	3·67	3·23	4·50	31·58
,,	,,	Alwinton (Biddleston)	1·26	2·19	2·08	4·30	2·75	4·91	2·61	2·88	1·34	4·71	3·40	4·00	36·43
,,	,,	Howick Hall	·62	·76	1·64	3·48	2·03	4·21	3·16	2·75	1·02	3·50	3·25	4·36	30·78
,,	Cumberland	Borrowdale (Seathwaite)	11·40	14·07	13·78	10·08	8·48	13·66	21·04	9·05	8·18	9·14	18·52	12·29	149·69
,,	,,	Scaleby Hall	2·38	2·56	2·54	3·83	1·48	3·21	4·98	3·28	1·93	4·35	5·41	2·99	38·94
,,	Westmoreland	Kendal	4·11	5·42	5·49	4·49	2·94	5·35	8·28	4·49	3·37	3·67	7·35	4·86	59·82
,,	,,	Kirkby Stephen	3·33	4·58	3·32	3·45	1·68	5·61	6·01	2·83	2·08	3·59	6·39	3·94	46·81
,,	,,	Brougham Hall	2·10	2·23	2·70	4·03	·84	3·21	4·43	2·92	1·77	2·61	4·98	3·19	35·01

MONMOUTH, WALES AND THE ISLANDS.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XI.	Monmouth.....	Newport (Gold Tops)	3·41	3·13	2·81	5·92	2·91	5·03	5·97	5·00	5·11	6·77	5·90	5·02	56·98
,,	,, ...	Abergavenny.....	3·04	2·55	3·34	6·28	2·73	3·49	4·74	2·89	3·02	6·22	4·64	3·88	46·82
,,	Glamorgan.....	Cardiff	4·30	3·74	3·66	6·06	3·07	5·00	6·61	7·52	4·40	8·40	6·81	9·09	68·66
,,	,, ...	Ystalyfera (Tan-y-rallt) ...	8·01	5·44	5·99	6·76	2·76	5·55	10·52	7·33	3·34	8·14	9·46	7·85	81·15
,,	Carmarthen	Carmarthen Asylum	5·47	4·58	3·32	5·53	1·74	3·76	7·28	5·35	4·52	8·17	6·66	6·30	62·68
,,	,, ...	Llandovery	5·21	5·12	3·84	5·48	2·50	5·02	8·24	6·16	3·17	5·79	8·21	6·90	65·64
,,	Pembroke	Stackpole Court	5·02	3·16	2·28	4·80	1·24	4·14	5·78	3·66	5·28	6·39	7·00	8·01	56·76
,,	,, ...	Fishguard (Castle Hill) ...	4·40	5·28	3·91	3·90	1·27	4·62	7·35	6·11	4·91	7·38	5·94	5·16	60·23
,,	Cardigan	Aberystwith (Goginan).....	4·78	4·98	2·97	4·40	2·55	6·23	6·28	7·05	3·77	6·15	7·45	5·75	62·36
,,	Brecknock.....	Brecknock.....	4·38	4·92	2·65	5·66	3·32	3·20	5·69	4·04	2·68	5·47	7·64	4·51	54·16
,,	Radnor	Rhayader (Nantgwilt).....	7·39	6·04	4·25	8·24	2·43	5·99	7·45	5·82	3·63	6·67	11·63	9·23	78·77
,,	,, ...	Presteign	2·72	3·11	1·92	4·24	2·29	3·56	5·76	2·48	3·02	5·88	4·78	4·11	43·87
,,	Montgomery.....	Carno.....	6·53	3·96	5·17	4·66	2·51	5·99	5·08	5·17	3·33	6·17	10·92	7·24	66·73
,,	Flint	St. Asaph (Nantllys)	2·47	1·80	2·16	3·65	1·50	3·59	3·65	3·14	2·24	2·21	4·56	3·54	34·51
,,	Denbigh.....	Rosset (Trevalyn Hall) ...	2·23	1·53	1·53	3·53	1·74	3·06	3·05	2·26	1·38	3·06	3·67	3·70	30·74
,,	Merioneth	Dolgelly.....	5·33	6·08	4·19	5·33	2·68	7·66	7·69	5·99	4·44	5·94	11·28	8·34	74·95
,,	,, ...	Bala	6·16	4·19	4·26	4·07	2·76	5·09	6·88	4·84	2·45	4·88	9·17	7·18	61·93
,,	Carnarvon..... ..	Port Madoc	4·70	4·18	3·86	4·34	2·18	7·04	7·24	5·75	3·62	6·63	7·92	8·17	65·63
,,	Anglesey	Menaifron	3·44	2·28	2·95	3·57	2·56	3·85	4·15	3·24	2·47	3·43	4·87	4·25	41·06
,,	Isle of Man	Douglas.....	2·78	3·55	3·18	4·53	1·07	3·55	5·42	3·78	3·92	5·27	8·29	4·71	50·05
,,	Jersey.....	St. Aubin's School	1·55	1·74	1·65	2·71	1·36	3·16	3·10	2·33	3·21	5·90	8·77	5·93	41·41
,,	Guernsey	Grange Road.....	1·90	2.43	2·26	4·31	2·46	3·05	3·25	3·22	3·94	7·44	8·45	6·20	48·91
		SCOTLAND.													
XII.	Wigtown	Stoneykirk(Ardwell House)	2·72	3·13	2·43	3·07	1·58	2·73	4·38	2·99	4·59	2·62	5·84	3·30	39·38
,,	Kirkcudbright ...	Colvend.....	2·35	3·15	4·23	2·86	1·20	3·81	5·30	3·20	3·17	4·96	5·00	3·27	42·50
,,	,, ...	Dalbeattie.....	3·08	4·56	4·44	3·49	1·49	3·63	6·89	3·58	4·80	4·61	5·72	3·22	49·51
,,	,, ...	Carsphairn	5·96	8·62	5·89	4·14	2·28	4·31	8·61	5·08	5·58	6·84	10·01	4·97	72·29
,,	Dumfries	Moffat (Ericstane)	5·65	6·70	5·60	7·30	2·85	4·80	8·45	2·70	4·15	4·30	6·75	6·20	65·45
,,	Roxburgh	New Castleton (The Flatt).	3·60	4·30	4·70	3·00	2·20	5·30	7·80	2·90	2·20	3·50	5·50	4·60	49·60
,,	,, ...	Hawick (Branxholme).....	1·22	2·89	3·60	3·00	1·64	5·26	3·89	1·87	1·80	3·18	3·79	9·17	41·31
,,	,, ...	Jedburgh	1·28	1·57	2·06	2·09	2·34	3·81	2·93	2·03	1·99	2·15	2·69	3·76	28·70
,,	,, ...	Wooplaw [Galashiels]	1·86	1·81	2·25	3·67	2·97	3·83	3·69	2·32	1·88	3·07	3·71	4·46	35·52
XIII.	Peebles	Glenrath	3·05	3·15	5·61	3·93	3·47	3·12	4·60	1·76	2·95	3·17	5·28	4·78	44·87
,,	,, ...	N. Esk Res. [Penicuick]...	3·75	3·25	5·50	3·20	2·65	4·45	4·70	2·50	3·10	3·35	4·45	5·65	46·55

SCOTLAND—(*continued.*)

Dia.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XIII.	Berwick	Marchmont House	1·54	1·91	1·84	4·49	2·52	3·89	3·96	3·26	2·40	5·15	3·41	5·20	39·57
,,	Edinburgh	Charlotte Square	1·20	1·50	2·28	2·50	2·65	2·78	3·73	1·44	1·77	2·65	2·83	4·90	30·23
,,	Linlithgow	Bathgate	2·72	2·25	4·76	3·04	2·41	4·95	4·74	1·64	2·58	3·47	4·57	4·56	41·69
XVI.	Lanark	Douglas Castle	4·97	3·05	4·81	3·49	2·31	3·92	5·17	3·70	3·29	3·41	6·50	6·47	51·09
,,	,,	Cambuslang	3·06	2·90	3·52	1·98	2·06	3·09	3·93	2·25	2·90	3·99	5·42	4·16	39·26
,,	Ayr	Girvan (Pinmore)	3·84	3·39	4·06	3·44	2·21	3·71	6·09	4·05	5·70	3·55	8·94	4·57	53·55
,,	,,	Ayr	2·94	2·64	3·65	2·41	1·50	3·28	4·05	3·84	3·45	3·56	5·80	3·92	41·04
,,	,,	Kilmarnock (North Craig)	4·41	3·70	3·49	2·40	1·80	4·29	4·86	3·79	4·10	4·15	5·99	3·54	46·52
,,	Renfrew	Glasgow (Queens' Park)	3·65	3·89	3·50	1·99	2·41	3·32	4·03	1·82	3·46	3·36	5·50	4·42	41·35
XV.	Dumbarton	Arrochar	8·87	8·25	8·00	7·25	4·14	6·53	11·30	6·65	3·60	9·70	10·51	9·47	94·27
,,	Stirling	Falkirk	3·50	3·20	3·40	2·30	1·40	2·80	2·30	1·50	1·70	3·40	4·60	4·40	34·50
,,	,,	Killearn	6·22	5·12	5·14	3·03	3·46	4·47	7·00	1·93	4·11	4·98	6·35	6·67	58·48
,,	Bute	Pladda	3·75	4·46	3·52	3·52	1·36	2·84	4·36	4·25	3·70	3·49	8·17	3·81	47·23
,,	Argyll	Loch Gilphead (Kilmory)	7·32	4·79	6·84	2·53	3·22	4·21	8·33	4·05	7·61	4·58	11·89	7·01	72·38
,,	,,	Dalmally	9·76	7·87	10·94	4·19	4·38	6·72	8·32	4·93	5·76	3·63	9·94	8·90	85·34
,,	,,	Airds	6·29	5·85	7·48	3·54	3·07	4·47	7·09	3·69	7·43	5·96	8·84	6·11	69·82
,,	,,	Laudale	10·34	8·60	8·56	4·69	5·35	5·90	8·82	4·33	6·22	6·31	12·27	8·25	89·64
,,	,,	Devaar	5·36	3·94	3·26	2·77	2·42	4·31	4·95	3·82	5·75	3·29	9·00	5·66	54·53
,,	,,	Islay (Eallabus)	4·43	3·61	4·63	2·78	2·30	3·96	4·58	3·47	5·90	4·45	9·31	6·57	55.99
,,	,,	Jura (Fladda)	5·55	4·15	5·69	2·97	3·21	4·22	4·50	4·51	7·42	3·24	8·31	4·62	58·39
,,	,,	Tyree (Hynish)	5·26	5·18	5·82	2·94	4·15	3·32	4·15	4·33	5·46	7·93	8·52	6·62	63·68
XVI.	Fife	Craigluscar	2·10	3·20	2·70	4·00	2·00	3·20	4·50	2·30	3·00	4·40	5·16	6·50	43·06
,,	,,	Auchtermuchty	2·67	2·51	3·25	3·59	2·61	2·76	3·72	2·23	1·92	3·63	4·25	4·15	37·29
,,	Perth	Auchterarder	3·25	4·20	3·82	2·75	2·25	3·25	3·75	1·85	2·20	4·10	5·20	5·00	41·62
,,	,,	Stronvar	10·17	8·85	10·70	3·06	5·60	6·83	8·14	5·43	5·43	6·68	10·20	8·72	89·81
,,	,,	Dunkeld (Inver Braan)	3·11	4·12	3·36	2·83	2·31	3·27	5·97	2·37	3·48	5·25	5·05	4·99	46·11
,,	,,	Dalnaspidal H.R.S.	7·04	5·75	9·08	3·58	4·69	6 11	5·45	3·50	4·78	5·89	7·73	6·79	70·39
,,	Forfar	Dundee (Eastern Necrop.)	1·25	1·85	2·20	4·35	1·80	3·00	3·90	1·65	2·00	3·15	3·25	5·70	34·10
XVII.	Kincardine	The Burn	1·40	2·60	3·00	4·70	1·80	4·30	4·00	1·75	3·60	5·70	4·50	5·90	43·25
,,	Aberdeen	Coldstone Manse	1·41	1·14	2·00	3·04	2·00	3·63	4·99	1·73	3·50	2·38	3·92	3·93	33·67
,,	,,	Ellon (Tillydesk)	1·07	·97	1·73	2·35	1·14	3·02	2·60	2·43	2·08	4·19	4·80	6·14	32·52
,,	,,	New Pitsligo	1·98	·88	2·67	3·67	1·00	5·13	2·59	2·78	3·68	4·64	5·01	6·48	40.51
,,	Moray	Grantown	2·09	1·65	2·44	3·40	1·15	4·28	5·50	2·77	3·51	1·58	3·13	2·83	34·33
,,	,,	Gordon Castle	2·18	1·08	3·20	3·08	1·42	3·11	2·58	2·50	4·69	1·40	3·75	4·92	33·91
,,	,,	Elgin	2·05	1·04	2·68	2·42	1·76	3·12	2·45	2·05	5·09	1·73	3·38	4·71	32·48

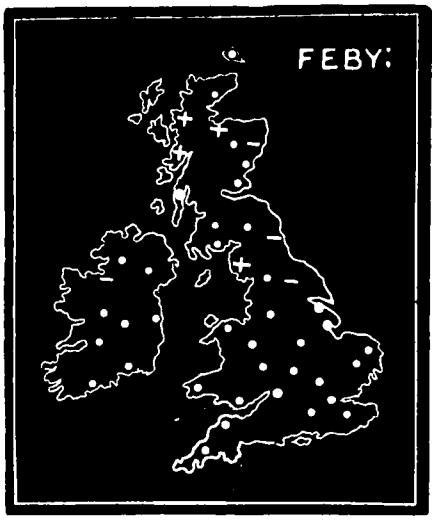
SCOTLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XVII.	Nairn	Nairn (Achareidh)	2·08	1·86	2·77	2·26	1·19	2·87	2·36	2·28	4·26	1·82	2·44	4·00	30·19
XVIII.	Ross	Loch Alsh (Inverinate)	10·38	8·05	13·57	4·85	2·20	6·01	6·35	5·82	5·61	2·52	13·25	9·12	87·73
,,	,,	Strome Ferry H.R.S.	6·60	6·37	7·88	3·09	3·26	4·48	6·60	3·81	6·28	3·33	10·46	6·61	68·77
,,	,,	Strathconan	7·37	6·71	10·70	4·97	2·55	3·61	3·65	2·73	3·65	·91	7·89	4·19	58·93
,,	,,	Invergordon	2·45	2·38	5·10	2·57	1·39	2·99	3·10	1·47	2·69	1·39	2·73	4·24	32·50
,,	Inverness	Fort William	13·49	9·69	14·91	3·96	4·31	4·37	6·47	5·13	5·70	3·65	10·28	7·59	89·55
,,	,,	Skye (Sligachan)	18·31	14·15	16·35	6·68	7·22	6·50	9·42	7·05	8·46	7·70	12·87	11·27	125·98
,,	,,	Glenstrathfarrer	6·02	10·22	11·85	3·65	3·00	4·20	3·19	5·77	3·22	5·02	8·03	6·27	70·44
XIX.	Sutherland	Invershin	2·79	3·81	3·45	2·87	3·27	3·18	2·87	3·02	3·17	3·47	2·19	3·15	37·24
,,	,,	Scourie	3·20	3·50	5·80	2·50	2·30	2·60	2·70	3·60	5·10	1·80	5·30	4·30	42·70
,,	,,	Forsinard H.R.S.	3·79	3·38	5·89	2·88	1·68	4·91	5·26	3·00	5·60	1·92	4·60	4·96	47·87
,,	Caithness	Wick H.R.S.	2·50	1·34	3·23	2·09	1·22	3·97	3·85	2·22	2·52	2·50	5·07	3·43	33·94
,,	Shetland	Sumburgh Head	3·15	3·64	4·16	2·25	·98	2·60	1·90	2·65	3·50	2·52	5·47	4·50	37·32
							IRELAND.								
XX.	Cork	Cork (Black Rock)	4·27	5·29	2·19	5·51	2·52	3·67	5·24	3·49	2·24	5·35	5·10	5·31	50·18
,,	,,	Fermoy (Glenville)	3·79	6·16	2·81	6·07	3·04	3·46	6·76	3·18	2·93	5·95	5·74	5·18	55·07
,,	Kerry	Dromore Castle	5·38	4·95	4·50	7·34	2·65	4·92	8·86	4·23	3·19	7·25	9·05	7·80	70·12
,,	,,	Cara, Lake Side	2·43	2·94	2·49	4·73	2·18	3·49	5·39	3·64	2·98	5·70	7·74	5·33	49·04
,,	,,	Tralee (Castlemorris)	4·78	3·16	2·52	4·25	2·68	2·88	6·59	2·90	3·63	4·40	6·52	2·92	47·23
,,	Waterford	Waterford Gas Works	3·79	4·38	1·83	4·85	2·36	2·64	5·08	3·41	2·82	4·97	4·03	3·95	44·11
,,	Tipperary	Cabir (Tulrid)	2·25	3·51	2·08	4·18	3·12	2·53	6·18	3·42	1·35	4·55	3·99	3·93	41·09
,,	,,	Tipperary, Henry Street	2·82	3·60	3·19	4·43	2·64	3·54	4·87	2·96	1·65	4·56	5·69	4·04	43·99
,,	,,	Nenagh (Castle Lough)	2·91	3·21	4·28	4·35	2·76	2·89	5·52	3·22	2·71	3·87	6·00	3·40	45·12
,,	,,	Gurteen	2·15	2·53	2·54	3·08	2·97	3·14	5·05	3·32	1·10	3·71	5·59	3·50	38·68
,,	Limerick	Jane Ville	2·49	2·45	4·07	7·53	2·15	4·42	5·97	3·50	1·69	4·02	4·36	3·92	46·57
,,	Clare	Ennis	3·05	3·09	4·04	3·97	1·39	4·44	4·92	3·43	1·87	5·46	5·72	2·95	44·33
,,	,,	Miltown Malbay	3·38	4·56	4·16	5·18	2·20	4·43	5·57	3·53	2·82	5·82	5·84	4·10	51·59
XXI.	Wexford	Ballyhyland	3·05	5·84	2·40	5·87	3·02	4·17	5·31	5·91	4·53	4·86	4·83	5·00	54·79
,,	,,	Gorey (Courtown)	3·37	2·27	2·64	3·86	2·51	2·42	5·04	2·41	3·80	5·68	5·10	4·44	43·54
,,	Kilkenny	Kilkenny (Lavistown)	1·68	2·34	1·82	3·55	2·01	3·09	4·92	3·05	2·21	3·25	3·18	2·58	33·68
,,	,,	Stoneyford (Inisnag Glebe)	2·06	2·96	2·00	3·25	2·50	3·25	4·50	4·09	1·76	3·00	5·20	2·60	37·17
,,	Wicklow	Bray Fassaroe	3·05	4·00	2·80	6·07	2·50	2·54	4·15	2·45	4·19	5·61	6·23	5·20	48·79
,,	Carlow	Brown's Hill	1·88	3·36	2·07	3·75	4·10	3·00	5·83	2·40	3·16	3·32	3·90	3·46	40·23
,,	Queen's Co.	Abbey Leix, Blandsford	1·74	2·62	2·91	4·14	4·03	3·33	5·81	3·05	2·24	3·40	4·21	3·23	40·71

IRELAND—(*continued.*)

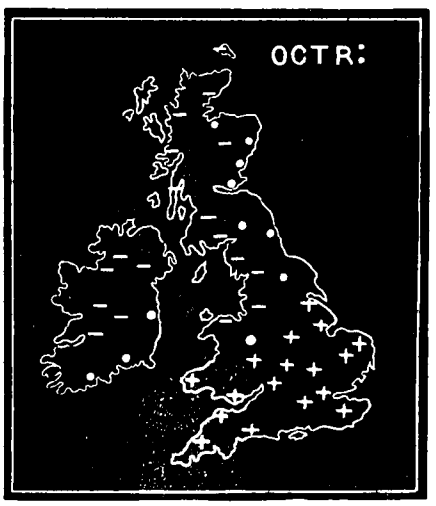
Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XXI.	King's Co.	Clonbrin	2·16	2·58	3·80	3·18	4·00	2·74	5·70	2·82	2·28	3·01	4·49	3·19	39·95
,,	,,	Tullamore	2·31	1·33	3·35	3·09	3·70	2·46	4·30	1·99	2·39	3·20	4·40	3·51	36·03
,,	Dublin	Glasnevin Botanic Gardens	1·25	1·85	2·41	3·40	1·48	2·08	3·75	2·05	2·60	3·05	3·63	4·02	31·57
,,	,,	Balbriggan	1·55	2·16	2·42	3·88	2·34	2·62	3·90	2·64	3·16	2·97	4·28	3·89	35·81
,,	Meath	Trim	2·56	2·32	3·27	3·03	2·17	2·32	5·44	2·44	2·62	3·34	4·47	5·04	39·02
,,	Westmeath	Athlone (Twyford)	2·52	2·95	4·73	4·37	4·03	3·20	7·41	5·58	2·19	3·44	7·12	3·04	50·58
,,	,,	Mullingar (Belvedere)	2·57	3·08	2·34	4·15	3·18	3·28	5·31	3·49	1·84	3·33	6·28	3·61	42·46
,,	Louth	Stephenstown	1·99	2·15	2·62	4·20	2·61	3·17	4·41	3·15	2·79	2·87	4·57	3·26	37·79
XXII.	Galway	Ballinasloe	2·53	2·38	3·45	3·65	3·31	2·81	6·38	3·79	1·51	3·43	5·49	3·01	41·74
,,	,,	Clifden (Kylemore)	6·37	6·91	8·68	6·31	3·09	5·44	9·27	6·41	4·38	10·32	11·90	7·39	86·47
,,	,,	Tuam	2·42	2·76	4·00	3·60	3·62	3·43	6·61	3·69	3·01	5·25	7·66	4·17	50·22
,,	Mayo	Ballinrobe	3·45	3·96	5·46	3·69	4·13	3·76	5·23	3·75	2·81	6·69	7·72	5·20	55·85
,,	,,	West Port (Old Head)	3·40	3·30	5·25	4·50	2·40	4·10	5·50	4·95	3·90	5·60	8·00	6·70	57·60
,,	,,	Crosmolina (Enniscoe)	3·76	3·43	5·33	2·89	3·24	4·31	6·58	6·40	3·44	4·12	8·71	5·61	57·82
,,	Sligo	Sligo (Mount Shannon)	3·27	1·39	4·81	2·42	2·34	5·22	4·57	4·05	4·37	2·75	7·07	4·12	46·38
,,	Leitrim	Carrick-on-Shannon	2·06	1·93	3·53	2·50	1·87	4·34	5·18	4·04	3·12	3·20	4·57	3·40	39·74
XXIII.	Cavan	Killeshandra (Drummany)	2·24	1·38	3·85	2·40	1·95	2·81	6·95	2·61	2·84	2·54	5·05	3·66	38·28
,,	,,	Lough Allen (Dowra)	2·76	1·91	4·09	2·27	1·96	5·36	4·46	3·40	2·49	2·65	7·49	4·81	43·65
,,	Fermanagh	Enniskillen (Lisbellaw)	2·20	1·44	2·74	1·94	1·75	3·42	5·10	3·49	2·73	2·53	6·24	3·70	37·28
,,	Monaghan	Rockcorry	2·46	2·29	3·80	4·07	3·30	4·70	5·71	3·86	2·82	2·72	6·27	3·70	45·70
,,	Armagh	Armagh	2·16	1·72	3·06	3·01	3·33	2·86	4·54	2·47	3·40	2·42	5·47	3·38	37·82
,,	Down	Newcastle (Fairleigh)	3·66	5·00	3·38	5·40	3·20	3·39	5·62	5·69	4·58	6·13	7·38	5·82	59·25
,,	,,	Newtownards	1·60	1·57	2·16	3·30	1·57	3·14	4·17	2·89	3·32	3·26	4·54	3·76	35·28
,,	Antrim	New Barnsley	2·43	3·00	3·33	4·40	2·28	4·83	5·99	4·30	4·54	2·97	7·64	4·74	50·45
,,	,,	Ballymena	2·49	3·00	3·17	2·70	2·96	4·81	6·99	3·24	4·00	2·87	6·40	4·30	46·93
,,	,,	Bushmills	2·23	2·40	3·32	2·76	2·15	3·80	6·68	2·90	4·15	2·70	7·48	4·66	45·23
,,	Londonderry	Newtown Limavady	2·42	3·19	3·07	2·51	2·30	3·37	5·74	2·07	4·47	2·03	6·99	3·72	41·88
,,	Donegal	Inver Glebe	2·55	3·69	4·95	2·77	2·94	4·08	4·15	1·25	7·59	4·08	4·74	4·80	47·59
,,	,,	Ramelton	3·60	2·95	3·59	2·05	1·97	4·11	5·90	4·06	3·88	3·56	8·77	5·10	49·54
,,	,,	Carndonagh	4·15	3·16	3·86	2·93	2·38	4·12	5·46	3·40	4·55	4·05	7·69	5·16	50·91

MONTHLY MAPS OF RAINFALL in 1882.



For explanation see page [125].

MONTHLY MAPS OF RAINFALL in 1882.



For explanation see page [125].

REMARKS.

JANUARY.

Rain (and snow) fall generally near the average; very much below it in Devonshire and Cornwall, but greatly above it in the N.W. of Scotland, where several stations had upwards of ten inches.

FEBRUARY.

Another nearly average month; much below the average on the N.E. coast of England, and above it in the N.W. of Scotland.

MARCH.

Rainfall above the average in Scotland and most of Ireland, but below it over nearly the whole of England.

APRIL.

A wet month; rainfall above the average at almost every station, and in several parts of central England reaching twice the usual amount.

MAY.

Nearly an average month in all parts of the British Isles, but with a tendency towards dryness rather than to the reverse. In Devon, Cornwall, and South Wales, it may be considered as a decidedly dry month.

JUNE.

A cold, wet month; the excess being due rather to frequent small falls than to individual heavy ones. At Banbury the fall was more than twice the average, but that excess was produced by a very heavy fall (2·04 in.) on 22nd.

JULY.

On the whole this must be described as a wet month, especially in Cornwall, the English Lakes, and the North of Ireland. Hampshire, Hertfordshire, Norfolk, Suffolk and Lincolnshire had, however, rather less than their average rainfall.

AUGUST.

The first half of this month was generally fine, the second half

showery, but though damp and cold, it was not sufficiently rainy to counteract the dryness of the early part, and therefore, in spite of the unpropitious weather on and after the 12th, the August rainfall remains below the average.

SEPTEMBER.

Rainfall generally below the average, especially in Lancashire and Yorkshire, in the English Lakes, in Wales, in most of Scotland, and in all Ireland except the North-East.

OCTOBER.

A very wet month at all stations south of the Humber, but dry in Scotland and in most parts of Ireland. There were many stations in the South-East, East, and centre of England, at which the fall was more than double the average.

NOVEMBER.

This month was more generally wet than October, but the excesses, though more numerous, were not so large. In fact, the fall in November was less than in October at nearly every English station except those dominated by mountains, but in Scotland and Ireland November was much wetter than October.

DECEMBER.

The English Lakes and the upper part of Aberdeenshire seem to have been the only places with less than the average rainfall. The amounts of the excesses are rather irregular, partly, no doubt, through some observers not being familiar with the mode to be adopted when a fall of snow exceeds 2 feet on the level, as was the case at several stations on December 7th.

ON THE RELATION OF THE RAINFALL OF 1882 TO THE AVERAGE 1870—79.

This may be described as to a certain extent the summing-up of the year's work, and it may at first be thought to have been anticipated in the article on pages 17 to 27. This is partly true, but we were there comparing a group of years with the average, 1840—79, and we were there dealing with only 45 stations, whereas in the present note we are able to utilize 170 with the necessary result of having a much better distribution, especially in Scotland and Ireland. On the four pages [137] to [140] will be found the actual data upon which the following remarks upon the year are chiefly based, and as a prefix to those remarks, we give the following abstract of those tables; any one who is fond of long addition sums, can check our arithmetic if so disposed.

ABSTRACT.

COUNTRIES.	No. of Records	Mean. 1860-9	Mean. 1870-9.	1882.	Diff. from aver. 1870-79.	
					Amount.	Per cent.
		in.	in.	in.	in.	
England and Wales ...	130	34·53	35·44	41·91	6·47 +	19
Scotland	33	38·85	40·61	44·75	4·14 +	10
Ireland	7	35·97	36·98	40·83	3·85 +	11
Total, British Isles ..	170	35·43	36·53	42·42	5·89 +	17

We must also ask our readers to examine the annexed map, after carefully reading the notes at the bottom of it; and though last, by no means least, they should not neglect the notes upon the years on pages [86] to [113], many of which (*e.g.*, that by Mr. Clegram, C.E., on page [97]) are of exceptional interest and importance.

A moment's glance at the map gives the broad general features of the relation of 1882 to the 1870–9 average as one of almost universal, and very great, excess. Over the greater part of England, as is shown

by the + marks being enclosed in rings, the excess has been more than 25 per cent., and at not one of these stations in the British Isles was it 10 per cent. below the average. In fact, there are only ten stations in the whole country at which the fall was below the average, and half of them are in the immediate vicinity of London; the others being all wide apart, and probably applying only to very small areas.

The broad feature of the year is, therefore, a very considerable excess, one not so great as in 1872, but still of very considerable importance. The abstract table shows that over the whole country the fall was 17 per cent. above the average of 1870–9, and as that average is itself about 5 per cent. too high, it follows that the rainfall of 1882 was about 22 per cent. above the average of a long series of years.

On turning back to page 25, and taking the average of the column for 1882, we find that it gives 19 per cent. as the excess; and, lastly, on looking at the frontispiece diagram which was lithographed long before this article was written, we find 1882 represented as 24 per cent. in excess. The close agreement of these three values, 22, 19 and 24, may perhaps be accepted as evidence that rainfall values are being brought into fair accordance.

I wish that the results for other countries were worked up in a similar way, so that we might determine over what extent of the earth's surface such excesses prevail.

DIFFERENCE OF TOTAL RAINFALL IN 1882 FROM THE AVERAGE 1870-79.

The round dots indicate a rainfall within 10 per cent. of the average.

The + and − respectively show excess or defect of between 10 and 25 per cent.

The same signs enclosed by a ring indicate a departure from the average of more than 25 per cent.

COMPARISON OF THE RAINFALL OF THE YEAR 1882, WITH THE AVERAGE OF THE YEARS 1870-79.

ENGLAND & WALES.

DIV.	COUNTY.	STATION.	Average.		Depth in 1882.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.	in.	
I.	Middlesex ...	London (Camden Square)	25·68	27·24	27·14	·10 —	0
II.	Surrey	Weybridge Heath	25·05	26·18	25·99	·19 —	1
,,	,, ...	Seething Wells	26·55	25·73	24·21	1·52 —	6
,,	,, ...	Wimbledon	23·48	25·11	24·79	·32 —	1
,,	,, ...	Kew Observatory	23·28	24·76	25·66	·90 +	4
,,	Kent	Maidstone (Hunton Ct.)..	26·00	26·06	28·40	2·34 +	9
,,	,, ...	Charing (Otterden).....	29·09	31·02	36·30	5·28 +	17
,,	,, ...	Greenwich (Royal Obser.)	25·18	25·39	25·18	·21 —	1
,,	West Sussex.	Arundel (Dale Park) ...	33·73	33·81	40·57	6·76 +	20
,,	,, ...	Chichester (Chilgrove) ...	33·22	35·03	35·71	·68 +	2
,,	East Sussex..	Lewes (Glynde Place) ...	33·65	33·75	39·19	5·44 +	16
,,	,, ...	Maresfield (Forest Lodge)	31·48	33·37	36·39	3·02 +	9
,,	Hampshire ..	Isle of Wight (Osborne).	30·73	29·21	30·13	·92 +	3
,,	Berkshire ...	Newbury (Welford)	28·97	31·92	39·23	7·31 +	23
,,	,, ...	Long Wittenham	27·38	27·24	34·58	7·34 +	27
III.	Herts	St. Albans (Gorhambury).	27·85	29·07	37·06	7·99 +	28
,,	,, ...	Hemelhempstead	26·39	28·66	35·22	6·56 +	23
,,	,, ...	Berkhampstead	29·28	31·33	35·31	3·98 +	13
,,	,, ...	Hertford (Bayfordbury)..	25·01	27·02	27·64	·62 +	2
,,	,, ...	Tring (Cowroast)	27·59	30·62	34·60	3·98 +	13
,,	,, ...	Hitchin	23·92	25·67	29·24	3·57 +	14
,,	,, ...	Royston	23·57	23·74	26·21	2·47 +	10
,,	Buckingham.	High Wycombe	25·71	25·87	30·67	4·80 +	19
,,	Oxford	Banbury (High Street) ..	26·22	28·51	40·18	11·67 +	41
,,	Northampton	Northampton (Althorp)..	23·35	26·93	32·87	5·94 +	22
,,	,, ...	Wellingborough	24·09	25·72	36·16	10·44 +	41
,,	Bedford	Cardington .....0 ft.	22·49	25·13	29·94	4·81 +	19
,,	,, ...	,, ... 3 ft.	21·76	23·69	28·84	5·15 +	22
,,	Cambridge...	Ely (Stretham)	20·61	23·11	26·82	3·71 +	15
IV.	Essex	Braintree (Bocking)	23·98	26·20	29·91	3·71 +	14
,,	Suffolk	Bury S. Edmun. (Westley)	23·52	25·51	30·05	4·54 +	18
,,	,, ...	,, (Barton)	23·68	25·71	30·55	4·84 +	19
,,	,, ...	,, (Culford)	24·84	26·20	31·08	4·88 +	19
,,	,, ..	Carlton Colville	24·29	26·42	32·44	6·02 +	23
,,	Norfolk	Norwich(HoninghmHall)	23·98	27·31	33·89	6·58 +	24
,,	,, ...	,, (Cossey)	24·04	27·44	32·26	4·82 +	18
,,	,, ...	Holkham.....	23·88	26·21	28·17	1·96 +	7
,,	,, ...	Hunstanton	19·56	23·26	29·02	5·76 +	25
V.	Wiltshire ...	Heytesbury (Chitterne)...	29·28	30·53	35·97	5·44 +	18
,,	,, ...	Swindon (Pen Hill)	28·59	29·64	37·73	8·09 +	27
,,	,, ...	Thames Hd. [Cirencester]	28·29	33·06	44·05	10·99 +	33
,,	Dorset	Cerne Abbas (Melbury)...	39·99	40·92	47·31	6·39 +	16
,,	Devon	Bovey Tracey	43·13	46·80	50·72	3·92 +	8
,,	,, ...	Exeter (D. & E. Inst.) ...	31·76	34·69	38·98	4·29 +	12

ENGLAND & WALES.—*Continued.*

DIV.	COUNTY.	STATION.	Average.		Depth in 1882.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.	in.	
V.	Devon	S. Molton (Castle Hill)...	47·12	47·62	60·78	13·16 +	28
,,	,, ...	Barnstaple	39·91	42·43	53·71	11·28 +	27
,,	Cornwall ...	Penzance (South Parade)	41·51	46·80	59·12	12·32 +	26
,,	,, ...	Bodmin (Castle St.)	47·71	52·01	60·18	8·17 +	16
,,	Somerset ...	Glastonbury (Street)	30·01	33·14	37·85	4·71 +	14
,,	,, ...	Sherborne Reservoir	42·10	47·26	50·96	3·70 +	8
VI.	Gloucester ...	Clifton	34·09	36·36	48·28	11·92 +	33
,,	Hereford ...	Ross (The Graig)	28·21	31·75	38·40	6·65 +	21
,,	Shropshire...	Oswestry (Hengoed)	35·65	39·55	42·19	2·64 +	7
,,	Worcester ...	Northwick Park.....	28·02	32·34	38·72	6·38 +	20
,,	,, ...	Tenbury (Orleton)	30·90	33·26	40·71	7·45 +	22
VII.	Leicester ...	Thornton Reservoir	25·61	27·59	35·02	7·43 +	27
,,	,, ...	Loughborough(Cedar Cot)	27·67	29·54	38·67	9·13 +	31
,,	,, ...	Belvoir Castle.....	24·48	25·75	35·73	9·98 +	39
,,	Lincoln	Spalding (Pode Hole).....	25·34	24·82	30·50	5·68 +	23
,,	,, ...	Boston.....	22·09	23·53	30·18	6·65 +	28
,,	,, ...	Lincoln	20·87	23·70	32·96	9·26 +	39
,,	,, ...	Stockwith	21·35	23·20	34·37	11·17 +	48
,,	,, ...	Brigg	24·12	23·31	30·19	6·88 +	30
,,	,, ...	Grimsby	21·39	23·04	29·12	6·08 +	26
,,	,, ...	Barnetby	22·16	25·17	36·91	11·74 +	47
,,	,, ...	Appleby Vicarage	24·10	26·64	35·08	8·44 +	32
,,	,, ...	New Holland	22·66	25·29	29·92	4·63 +	18
,,	Nottingham.	Worksop	22·47	25·63	32·31	6·68 +	26
,,	,, ...	Retford	22·74	23·04	30·08	7·04 +	31
,,	Derby.....	Bretby [Burton]...	27·41	30·97	40·40	9·43 +	30
,,	,, ...	Chesterfield.....	26·93	30·54	31·33	·79 +	3
,,	,, ...	Combs Moss	49·62	45·71	46·13	·42 +	1
,,	,, ...	,, Reservoir	50·01	45·67	46·74	1·07 +	2
,,	,, ...	Chapel-en-le-Frith..... ...	41·95	42·56	47·14	4·58 +	11
,,	,, ..	Kilnarsh (Norwood)	24·59	26·79	35·62	8·83 +	33
,,	,, ...	Woodhead Station.....	52·19	49·87	64·54	14·67 +	30
VIII.	Cheshire.. ...	Bosley Reservoir	32·04	34·10	42·70	8·60 +	25
,,	,, ...	,, Minns	32·85	33·90	43·13	9·23 +	27
,,	,, ...	Macclesfield(Park Green)	36·75	38·03	47·07	9·04 +	24
,,	,, ...	Bollington (Spond's Hill)	37·46	35·52	42·96	7·44 +	21
,,	,, .	Whaley	43·89	43·38	54·14	10·76 +	25
,,	,, ...	Marple Top Lock	35·25	35·94	43·70	7·76 +	22
,,	,, ...	,, Aqueduct	34·81	33·73	45·13	11·40 +	34
,,	,, ...	Godley Reservoir	33·98	34·85	44·01	9·16 +	26
,,	,, ..	Newton	31·63	29·30	42·43	13·13 +	45
,,	,, ...	Mottram (Matley's Field)	37·73	36·32	53·03	16·71 +	46
,,	,, ..	Arnfield Reservoir	37·23	41·38	51·39	10·01 +	24
,,	,, ...	Rhodes Wood Reservoir..	46·32	44·74	54·57	9·83 +	22
,,	,, ..	Woodhead M.C.W.W.....	51·83	49·74	60·22	10·48 +	21
,,	Lancashire...	Denton Reservoir	32·97	33·78	43·43	9·65 +	29
,,	,, ...	Gorton Reservoir	33·71	34·14	40·56	6·42 +	19
,,	,, ...	Manchester (Ardwick) ..	32·60	36·72	43·53	6·81 +	19
,,	,, ...	,, (Piccadilly)..	36·78	34·72	46·20	11·48 +	33
,,	,, ...	Fairfield	40·90	37·66	46·77	9·11 +	24
,,	,, ...	Ashton (Waterhouses) ...	36·13	39·24	51·04	11·80 +	30

ENGLAND & WALES.—*Continued.*

DIV.	COUNTY.	STATION.	Average.		Depth in 1882.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.	in.	
VIII.	Lancashire..	Bolton (The Folds).....	48·98	47·23	54·07	6·84 +	14
,,	,, ...	,, (Heaton).....	44·21	45·11	49·50	4·39 +	10
,,	,, ...	Ormskirk (Rufford)	35·00	36·65	39·65	3·00 +	8
,,	,, ...	Bolton (Belmont)	56·61	59·91	76·70	16·79 +	28
,,	,, ...	Heywood (Nayden Dane).	44·13	44·67	47·18	2·51 +	6
,,	,, ...	Blackburn (Guide Res.)..	41·30	44·49	47·14	2·65 +	6
,,	,, ...	Blackpool (South Shore).	32·99	34·43	42·05	7·62 +	22
,,	,, ...	Stonyhurst College	48·56	48·74	60·23	11·49 +	24
,,	,, ...	Cartmel (Holker)	45·63	45·13	50·96	5·83 +	13
,,	,, ...	Monk Coniston Park ...	85·55	74·86	81·30	6·44 +	9
IX.	York, W.R...	Sheffield (Redmires)	39·68	42·80	51·34	8·54 +	20
,,	,, ...	,, (Broomhall Pk.)	31·28	32·67	40·06	7·39 +	23
,,	,, ...	Dunford Bridge Station..	56·18	52·51	54·72	2·21 +	4
,,	,, ...	Penistone.....	30·57	34·37	40·33	5·96 +	17
,,	,, ...	Leeds (Leventhorpe Hall)	23·26	24·91	28·29	3·38 +	14
,,	,, ...	Halifax (Midgeley Moor).	50·00	48·07	62·65	14·58 +	30
,,	,, ...	,, (Warley)	46·33	45·27	59·49	14·22 +	31
,,	,, ...	Leeds (Holbeck).....	22·85	25·02	31·45	6·43 +	26
,,	,, ...	Arncliffe	60·07	60·95	77·21	16·26 +	27
,,	,, E.R ..	Hull (Beverley Road) ...	25·02	27·30	33·91	6·61 +	24
,,	,, N.R...	Malton.....	27·46	28·44	34·17	5·73 +	20
X.	North'mblnd	Allenheads	51·16	48·49	48·69	·20 +	0
,,	,, ...	Bywell.....	28·87	33·99	31·03	2·96 —	9
,,	,, ..	N. Shields (Rosella Place)	26·06	28·02	30·67	2·65 +	9
,,	,, ...	Stamfordham	27·64	30·10	31·58	1·48 +	5
,,	,, ...	Whittle Dean.....	25·42	27·75	28·81	1·06 +	4
,,	,, ...	Ilderton (Lilburn Tower).	28·66	31·33	37·90	6·57 +	21
,,	Cumberland.	Seathwaite	154·05	134·95	149·69	14·74 +	11
,,	,, ...	Ullswater (Hallsteads) ...	58·13	55·31	63·50	8·19 +	15
,,	,, ..	Keswick Post Office	62·40	59·14	69·67	10·53 +	18
,,	,, ...	Bassenthwaite(Mirehouse)	53·76	50·20	52·95	2·75 +	5
,,	,, ...	Cockermouth (Whi. Hall)	57·37	52·15	57·07	4·92 +	9
,,	Westm'relnd	Kendal.....	53·32	51·78	59·82	8·04 +	16
XI.	Glamorgan..	Cardiff (Ely)	42·02	46·35	56·73	10·38 +	22
,,	Carnarvon...	Llandudno	31·00	33·63	32·46	1·17 —	3

SCOTLAND.

DIV.	COUNTY.	STATION.	Average. 1860-9.	Average. 1870-9.	Depth in 1882.	Difference from average, 1870-9. Amount.	Per cent
			in.	in.	in.	in.	
XII.	Kircudbright	Cargen [Dumfries]	44·37	46·65	44·43	2·22 —	5
,,	Dumfries	Dumfries (Cri. Asylum)	39·00	41·84	42·64	·80 +	2
,,	Roxburgh	Kelso (Springwood Park)	24·66	27·90	29·27	1·37 +	5
XIII.	Peebles	North Esk Reservoir	38·01	38·66	46·55	7·89 +	20
,,	Haddington.	East Linton	23·77	29·36	28·12	1·24 —	4
,,	Edinburgh	Glencorse	37·52	40·52	41·58	1·06 +	3
,,	,,	Harlaw	37·64	38·04	40·60	2·56 +	7
,,	,,	Inveresk	29·02	30·31	34·27	3·96 +	13
XIV.	Lanark	Hamilton (Bothwell Cas)	28·89	31·72	34·36	2·64 +	8
,,	,,	Glasgow Observatory	44·41	43·29	44·37	1·08 +	2
,,	Ayr	Kilmarnock (N. Craig)	43·29	40·16	46·52	6·36 +	16
,,	Renfrew	Ryat Lynn	47·80	50·07	55·35	5·28 +	11
,,	,,	Waulk Glen	49·85	48·41	50·05	1·64 +	3
XV.	Stirling	Stirling (Kerse)	32·96	33·47	34·50	1·03 +	3
,,	Argyll	Lochgilphead (Poltalloch)	54·25	56·35	61·00	4·65 +	8
,,	,,	Stonefield	69·62	71·73	82·23	10·50 +	15
XVI.	Kinross	Loch Leven	36·22	38·05	43·00	4·95 +	13
,,	Perth	Aberfoyle	61·82	59·39	71·90	12·51 +	21
,,	,,	Dunblane (Kippenross)	36·16	36·00	38·50	2·50 +	7
,,	,,	Lanrick Castle	48·48	47·46	55·60	8·14 +	17
,,	,,	Bridge of Turk	61·89	72·32	86·80	14·48 +	20
,,	,,	Auchterarder (Colquh'lzie)	40·34	40·12	41·62	1·50 +	4
,,	Forfar	Craigton	34·88	41·96	48·60	6·64 +	16
,,	,,	Hill Head	35·19	41·82	49·18	7·36 +	18
,,	,,	Arbroath	29·05	30·49	30·27	·22 —	1
,,	Kincardine	The Burn	34·91	37·85	43·25	5·40 +	14
XVII.	Aberdeen	Braemar	33·40	38·14	40·67	2·53 +	7
,,	,,	Aberdeen (Rose Street)	29·43	31·75	32·20	·45 +	1
,,	Banff	Gordon Castle	29·19	32·26	33·91	1·65 +	5
XVIII	Inverness	Culloden	27·08	25·46	29·91	4·45 +	17
XIX.	Sutherland	Golspie (Dunrobin Castle)	27·69	31·94	39·35	7·41 +	23
,,	Orkney	Pomona (Sandwick)	38·85	36·24	38·77	2·53 +	7
,,	,,	Shapinsay (Balfour Cas.)	32·41	30·41	37·50	7·09 +	23

IRELAND.

XX.	Cork	Cork Royal Inst.	34·77	36·35	38·33	1·98 +	5
,,	Waterford	Portlaw	44·44	41·65	50·47	8·82 +	21
XXI.	Kilkenny	Inistioge (Woodstock)	39·38	46·64	49·68	3·04 +	7
,,	King's Co.	Tullamore	27·94	31·06	36·03	4·97 +	16
XXII.	Sligo	Markree	39·00	37·32	34·21	3·11 —	8
XXIII	Armagh	Armagh Observatory..1ft.	32·01	30·95	37·82	6·87 +	22
,,	Antrim	Belfast (Queen's Coll.)	34·22	34·92	39·32	4·40 +	13

EXTREMES OF RAINFALL IN 1882.

Largest Rainfall, at The Stye, Cumberland..... 202·50 in.
Least Rainfall, at Wimbledon Sewage Works, Surrey ... . 22·15 ,,

ENGLAND.

Greatest.			Least.		
Div.		in.	Div.		in.
X.	The Stye	202·50	II.	Wimbledon (Sewage Works)	22·15
,,	Seathwaite..... ...	152·46	IV.	Southend	22·57
,,	Sprinkling Tarn	150·31	II.	South Norwood.....	22·85
,,	Scawfell Pike	141·40	III.	Odsey [Royston]	22·93
,,	Ullscarf.....	137·20	,,	Hemelhempstead (Hoddesdon)	23·32
,,	Styehead Tarn	133·49	II.	Walton-on-Thames(Hersham)	23·44

WALES AND THE ISLANDS.

Greatest.			Least.		
Div.		in.	Div.		in.
XI.	Rhiwbryfdir	136·55	XI.	Rhyl (Sedgley House)	30·05
,,	Aberdare (Ty Draw)	128·93	,,	Denbigh (Glan-y-wern)	30·08
,,	Neath (Glyncorrwg)	115·06	,,	Rosset (Trevalyn Hall)	30·74
,,	Garthbibio (Bwlch Tomlyd)..	108·05	,,	Llandudno (Warwick House)...	32·46
,,	Llanbedr-y-Cennin(Llyndulyn)	102·54	,,	Port Erin	33·27
,,	Pen-y-gwryd	102·50	,,	Prestatyn (Nant).....	33·37

SCOTLAND.

Greatest.			Least.		
Div.		in.	Div.		In.
XVIII.	Skye (Sligachan)	125·98	XIII.	Coldstream (Milne Graden)...	26·50
,,	Glenquoich	116·41	,,	Dalkeith.....	27·70
,,	Loch Shiel (Glenaladale).....	115·61	,,	Prestonkirk (Smeaton)	27·95
XVI.	Glen Gyle	104·60	,,	East Linton	28·12
XV.	Ben Lomond.....	101·30	,,	Coldstream (The Hirsel).....	29·17
,,	Loch Eil (Conaglen)	100·55	XII.	Kelso (Springwood Park).....	29·27

IRELAND.

Greatest.			Least.		
Div.		in.	Div.		in.
XXII.	Clifden (Kylemore)	86·47	XXI.	Dalkey (Bellevue Park)	27·40
XX.	Kenmare (Derreen)	74·57	,,	Dublin (Fitzwilliam Square)	31·18
,,	Dromore Castle.....	70·12	,,	Glasnevin (Botanic Gardens)	31·57
,,	Valencia Observatory	64·49	,,	Monkstown (Easton Lodge)..	32·46
,,	Tralee (Ardfert Abbey)	61·12	,,	Lavistown.....	33·68
XXIII.	Newcastle (Fairleigh)	59·25	XXIII.	Donaghadee	34·59

GENERAL TABLES

OF

TOTAL RAINFALL IN 1882,

AT UPWARDS OF

2000 STATIONS

IN THE

BRITISH ISLES.

EXPLANATION OF THE ARRANGEMENTS OF THE FOLLOWING GENERAL TABLES.

The divisions are the same as those adopted by the Registrars General of England and Scotland. The boundaries of these divisions are shown on the map facing p. 170 of *British Rainfall*, 1876.

The counties follow the same order as in the reports of the before mentioned officers; but an alphabetical list of the counties is given, whereby the page or pages on which all returns from each county will be found can be at once ascertained.

The stations in each county are arranged nearly in the order of their latitude from South to North.

In order to facilitate finding the fall in any part of the country, the first name is almost always that of a place given in *Bradshaw*, the *British Postal Guide*, or the *Clergy List*; the second name is generally added to fix accurately the site of Observation; but in a very few instances, this second name is in [ ] instead of ( ); it then shows that the nearest town is in an adjoining county. For instance, "Lowestoft (Gisleham)" means Gisleham, near Lowestoft, both being in one county, but "Geldeston [Beccles]" means Geldeston, Norfolk, near Beccles, in another county—Suffolk.

The contents of the columns are sufficiently explained by the headings, except that in the column headed "diameter," figures will occasionally be noticed of a different type from the rest of the tables; these figures indicate the length of the sides of rectangular mouthed gauges. These measurements are all in inches.

The letter D denotes that a copy of the daily record has been received, that it is perfect throughout the year, and that the printed amount is the correct total of these daily entries.

An asterisk * denotes that the gauge was tested before erection, and a † that it has been visited and examined since. A note of interrogation (?) implies doubt, not necessarily error. ... indicates the absence of information.

In the column of altitudes several symbols are used, their meaning is as follows:—Ⱦ, that a series of levels has been taken from the gauge to an Ordnance bench mark; T, that the height is estimated or ascertained approximately from the same source; L, that levels have been taken from the gauge to the sea, or to some datum other than Ordnance mean sea level; B, that the altitude has been taken by the barometer; and ?, that the height is uncertain.

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ENGLAND AND WALES.

DIVISION I.—MIDDLESEX.

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
MIDDLESEX.						
Hampton Wick (The Grove).....	Sir T. J. Nelson.....	5	1 1	27 ⅄	24·78	123
Teddington (Gomer House)	R. D. Blackmore, Esq..	5	0 10	26 ⅄	24·37	161
Staines (Knowle Green)	Miss Pellatt	5	5 2	...	28·16	175
D Hanworth (Riversdale).....	G. Anderson, Esq.....	5	1 0	40 T	26·76	124
D† Isleworth (Spring Grove)	R. W. Peake, Esq. ...	5	1 3	69 T	25·49	155
D† ,, (Dunster Lodge)	Miss Ormerod.....	5	1 0	65 ⅄	26·33	195
,, (,, ,,)*mntly*	,, ,, ...	5	1 0	65 ⅄	26·10	...
D Chelsea (Whitehead's Grove).....	C. G. Rush, Esq.	5	1 0	24 T	24·03	...
D Gunnersbury Station	E. Mann, Esq.	5	0 11	35	25·81	...
D Ealing (Local Board Office)	C. Jones, Esq....	5	27 0	134 ⅄	27·66	185
D Westminster(SpringGrdns),S.W.	Sir J. W. Bazalgette, C.E	8	6 0	35 ⅄	25·40	154
,, (,, ,,)	,, ,, ,, ..	12	65 11	95 ⅄	23·27	154
,, (,, ,,)	,, ,, ,, ...	8	66 4	95 ⅄	21·21	154
London (Lansdowne Cres. W.)...	G. T. Gwilliam, Esq...	5	1 3	78 T	25·61	179
,, (Guildhall), E.C.	Col. Haywood, C.E. ...	8	2 6	49 T	21·70	132
,, (,,)	,, ,, ,, ...	8	51 0	98 T	21·38	132
,, (Regent's Pk. Roy. Bot. Soc.)	W. Sowerby, Esq.....	8	1 0	126 ⅄	27·18	168
D ,, (Springfield Road), N.W...	H. S. Wallis, Esq. ...	8	1 3	118 T	26·47	155
,, (,, ,,)*monthly*	,, ,, ,, ...	5	5 9	123 T	26·63	...
D† ,, (Camden Square), N.W. ...	G. J. Symons, Esq. F.R.S	8	0 8	111 ⅄	27·14	165
,, (,, ,,) *monthly*	,, ,, ,, ...	5	1 0	111 ⅄	27·10	...
† ,, (235, Camden Road), N. ...	W. B. Butler, Esq. ...	5	3 0	160 T	26·37	169
,, (,, ,,) ,, ...	,, ,, ,, ...	5	1 1	160 T	26·47	...
Hackney (Richmond Road), E....	J. W. Tripe, Esq. M.D.	5	7 0	65 ⅄	22·55	166
Holloway (Manor Road), N.....	Miss Varty	5	1 2	100	24·99	...
Hampstead (Rosslyn House), N.W.	C. H. L. Woodd, Esq..	8	1 4	330 T	27·26	...

DIVISION I.—MIDDLESEX.—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1882. inches.	Days on which ·01 or more fell.
MIDDLESEX—(*con.*)							
Hampstead (Kidderpore Reserv.)	T. Hack, Esq., C.E. ...	8	1	8	323 ⅄	27·83	147
D† ,, (Branch Hill Lodge)	B. Woodd Smith, Esq..	8	0	10	380 T	29·51	207
† ,, (Squire's Mount) ...	Rogers Field, Esq. C.E.	5	1	0	388 ⅄	27·38	179
,, (The Pryors)	,, ,, ,, ,,	5	1	0	327 ⅄	28·25	187
D Stoke Newington Res., N.....	J. Muir, Esq., C.E. ...	9	3	3	116 T	25·52	161
D†Highgate Nurseries, N....	J. Cutbush, Esq.	5	1	0	394 T	28·39	177
Child's Hill (Helenslea) N.W....	A. J. Woodhouse, Esq.	5	1	6	245 T	29·00	186
D Upper Clapton (Warwick Rd.).	W. Hayward, Esq. ...	5	3	6	...	28·84	188
*Clapton Common	J. Parnell, Esq.	5	1	1	98 ⅄	25·70	171
†Muswell Hill	Miss Abethell.....	5	0	8	310 T	30·51	...
Finchley East (Elmhurst).....	B. C. Wainwright, Esq.	8	0	7	300 T	29·20	170
D ,, (Avenue House).....	H. C. Stephens, Esq....	5	1	0	275 T	28·40	210
D Pinner Hill.....	W. A. Tooke, Esq. ...	5	3	6	410 T	29·78	174
D Uxbridge (Harefield Park)	W. F. Vernon, Esq. ...	8	1	0	296 ⅄	31·02	157
Winchmore Hill	W. T. Paulin, Esq. ...	8	1	0	...	27·98	181
,, ,, (Chase Side) ...	H. K. Mayor, Esq. ...	5	0	11	...	29·24	144
D Enfield (Old Park)	A. L. Ford, Esq.	5	1	9	156 T	29·67	205
D ,, (Nag's Head Lane)	J. Muir, Esq., C.E. ...	12	3	0	108 T	31·06	188
,, Chase	T. Paulin, Esq.	8	1	0	...	30·93	...

DIVISION II.—SOUTH-EASTERN COUNTIES.

SURREY.							
D Haslemere	J. W. Penfold, Esq. ...	8	4	0	481 ⅄	38·70	183
Godalming (Dunsfold)	Mr. W. Underwood ...	5	2	6	166	27·21	...
Haslemere (Weycombe)	G.B.Buckton,Esq.FRS.	5	4	0	583 ⅄	37·34	...
Cranleigh (Alderbrook).....	Mr. J. Bryan	5	1	0	370 ⅄	32·57	201
D Godalming (Witley)	Miss F. I. Foster	5	1	0	350 ?	31·19	178
Dorking (Holmbury).....	Mr. Bayman	5	1	0	553 T	36·51	198
D ,, (Abinger Hall)	T. H. Farrer, Esq. ...	8	2	0	400	32·68	190
D† ,, (Holmwood)	A. Sconce, Esq.	5	1	2	320 T	34·16	140
,, (Fir Tor)	F. Taylor, Esq.	5	0	10	280 B	36·30	...
D Betchworth (Brockham Vic.) ...	Rev. A. Cheales	5	1	0	158 ⅄	32·90	186
Guildford (Guildown)	Miss J. P. Hadden.....	5	0	11	220 T	26·97	146
D ,, (,,)	J. Rand Capron, Esq...	5	1	1	249 ⅄	28·10	170
D Farnham (The Bourne Vicarage)	Rev. T. W. Sidebotham	5	1	0	308 ⅄	30·46	186
D Reigate (Woodhatch Lodge) ...	T. B. Haywood, Esq...	5	1	0	270 T	31·96	193
D ,, (Ringley Mead)	R. L. Hesketh, Esq. ...	5	1	1	345 T	34·07	163
Dorking (The Denbies) (*Top*) ...	G. Dines, Esq.	5	1	0	610 T	34·23	...
†Redhill (Oxford Road)	W. H. Tyndall, Esq....	8	1	0	300 ⅄	33·14	205
D ,, (Thornielee)	N. Southall, Esq.	8	1	0	275 T	33·37	178
D Reigate (Dovers Lodge)	R. W. Clutton, Esq....	5	1	0	192	32·00	137
,, (Holmfels)	G. Baker, Esq.	5	1	0	264 T	31·51	194
,, (Springfield).....	T. P. Newman, Esq...	...	...		310 ?	33·73	...
† ,, (Wray Park)	A. Rosling, Esq.....	5	1	0	330 T	35·13	190
D ,, (Nutwood).....	H. E. Gurney, Esq. ...	5	1	4	330 ?	35·49	186
D Nutfield Priory	J. Fielden, Esq.....	8	1	2	478 ⅄	30·81	202

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
SURREY—(*con.*)						
D Reigate Hill	Baldwin Latham Esq CE	5	1 0	687 ⊼	33·36	175
D Godstone (Tyler's Green)	,, ,, ,, ...	5	1 0	366 ⊼	34·58	146
D Guildford (Wern)	Major Mathew	5	4 0	170	27·31	129
D Titsey [Westerham]	Baldwin Latham Esq CE	5	1 0	448 ⊼	36·00	215
D ,, (Botley Hill) [Westerham]	,, ,, ,,	5	1 0	870 ⊼	35·40	182
D ,, (,, ,, Farm)	,, ,, ,,	5	1 0	864 ⊼	34·57	184
D Chipstead (Parson's Green)	,, ,, ,,	5	1 0	506 ⊼	36·18	162
Caterham Asylum	G. E. Elliot, Esq., M.D.	5	1 0	610	31·53	115
D ,, Valley	Col. H. Grant Young..	5	3 0	485	34·86	174
Ashtead Rectory	Rev. W. R. C. Adamson	5	...	...	28·52	144
D† Chelsham (Henley)	W. Foster, Esq.	5	1 0	607 ⊼	35·53	206
D Kenley	Baldwin Latham Esq CE	5	1 0	501 ⊼	32·72	199
Woking (Horsell Vic.)	Rev. J. Back	5	1 0	122 T	27·00	...
D Cobham (Leigh Hill House)	J. Macaulay, Esq.	5	2 10	...	25·36	163
,, (Faircroft)	J. Webb, Esq.	8	0 8	72	24·01	...
D Caterham Junction (Tudor Cot.)	Baldwin Latham Esq CE	5	1 0	...	30·59	162
† Weybridge Heath (Bartropps)	Mrs. Harrison	8	0 6	150 ⊼	25·99	...
D ,, (Oakfield)	H. Yool, Esq.	5	1 0	107 ⊼	25·17	167
,, (Church Street)	,, ,, ,,	5	1 0	55 ⊼	25·57	...
Walton-on-Thames (Hersham)	G. Dines, Esq.	8	4 0	55 ⊼	24·46	...
,, ,, (,,)	,, ,, ,,	5	4 0	55 ⊼	23·44	...
,, ,, (,,)	,, ,, ,,	5	4 0	55 ⊼	23·90	...
D Addington	Baldwin Latham Esq CE	5	1 0	268 ⊼	29·51	149
Carshalton (Wallington)	R. R. Davis, Esq.	5	0 9	140	27·69	...
Sutton (Mulgrave Road)	W. Goode, Esq.	5	7 3	230 ⊼	26·92	158
D Beddington	S. Rostron, Esq.	5	1 0	102	25·45	169
D Croydon (Waddon House)	P. Crowley, Esq.	5	1 0	156 T	24·80	172
D ,, (Katharine Street)	G. Corden, Esq.	5	1 0	190	24·90	172
D† ,, (Nantwich House)	Baldwin Latham Esq CE	8	4 0	259 ⊼	25·43	167
D ,, (,, ,,)	,, ,, ,,	8	1 0	253 ⊼	26·49	167
D ,, (Brinstone Sew. Works)	,, ,, ,,	5	1 0	130 ⊼	25·67	174
D*† ,, (Addiscombe)	E. Mawley, Esq.	8	0 9	202 ⊼	26·34	188
*† ,, (,,) *monthly*	,, ,, ,,	8	0 9	202 ⊼	26·28	...
,, (,,)	,, ,, ,,	8	10 0	211	25·33	...
D Chertsey (Long Cross)	C. H. Berners, Esq.	8	1 9	...	27·25	162
,, (Burley Orchard)	W. Herring, Esq.	5	1 0	47 T	24·64	...
Surbiton (Seething Wells)	G. Lott, Esq.	10	0 6	25	24·21	183
D East Molesey (Palace Road)	Mrs. Jenkyns	8	6 5	37	22·88	185
South Norwood (Cumberlow)	W. F. Stanley, Esq.	8	1 0	190	22·85	153
,, ,, (Beulah Hill)	S. R. Scott, Esq.	5	1 0	350 ?	24·29	134
D Wimbledon	T. Devas, Esq.	12	3 0	157 T	24·79	203
D ,, (Sewage Works)	Baldwin Latham Esq CE	5	1 0	58	22·15	164
D† Lower Norwood	W. Marriott, Esq.	8	1 0	185 T	25·16	188
D Forest Hill (Border Lodge)	J. Porter, Esq.	5	0 11	260 T	25·53	149
Egham (Cooper's Hill)	The Meteor. Council	8	1 1	280	27·33	171
D Richmond (Ormond Lodge)	J. F. Billett, Jun., Esq.	5	0 9	50	25·99	170
D Kew Observatory	The Kew Committee	11	1 9	19 ⊼	25·66	197

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLeve	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
SURREY—(*con.*)						
Brixton (Acre Lane)	The Meteor. Council	8	1 0	77 T	24·55	172
D Battersea Creek	Sir J. W. Bazalgette, CE	8	27 2	41 ⅄	22·84	144
D Vauxhall (Effra Creek)	,, ,, ,, ,,	8	30 9	48 ⅄	21·73	160
KENT.						
D Hawkhurst (Sandhurst Rectory)	Rev. G. Ridout	5	1 3	208 ⅄	33·15	166
D Dymchurch (New Hall)	H. D. Good, Esq., C.E.	8	1 0	12 ⅄	26·78	...
Tenterden (Summerhill)	Rev. A. Wilkin	12	1 0	145 ⅄	29·27	136
Benenden (East End)	J. Ellis Mace, Esq.	8	1 9	193 ⅄	33·35	...
,, *Snowdon*	,, ,, ,,	5	1 0	150 T	30·58	...
D Tenterden	,, ,, ,,	8	1 5	190 ⅄	32·84	202
,, *Snowdon*	,, ,, ,,	8	1 5	190 ⅄	32·21	...
,, (Ashbourne)	A. Pinyon, Esq.	5	2 8	45 T	29·48	...
D† Hythe	H. B. Mackeson, Esq.	8	0 6	12 T	31·10	191
†Cranbrook (Swattenden)	R. Appach, Esq.	8	1 4	350 T	33·74	170
,, (Hartley)	G. Pile, Esq.	5	4 0	405 T	38·26	203
Hythe (Paddlesworth)	Mr. R. Dixon	8	1 0	608 ⅄	40·98	...
D Gowdhurst Vicarage	Rev. J. S. Clarke	5	1 1	412	30·18	181
Dover Station	The Meteor. Council	8	23 0	46	26·54	215
D† ,, (Pencester Street)	H. J. Poulter, Esq.	5	1 6	32	31·38	177
Tunbridge Wells	The Meteor. Society	5	1 0	500	35·09	203
D ,, ,, (Sherwood)	Sir W. Siemens, F.R.S.	5	4 3	490 ⅄	34·60	163
D Ashford (Bethersden)	W. H. Mold, Esq.	5	3 0	112 ⅄	31·32	186
D ,, (Beavor Green)	T. Nickalls, Esq.	5	1 0	155 T	35·00	209
,, (Kennington)	J. S. Burra, Esq.	8	...	...	33·35	...
Tunbridge Wells (Etherton Hill)	E. W. Winton, Esq.	5	1 5	276 ⅄	29·69	140
D ,, ,, (Pembury)	W. Brentnall, Esq. C.E.	8	1 8	181 ⅄	31·91	180
D Tunbridge (St. Mary's)	W. C. Punnett, Esq.	5	1 6	96 ⅄	31·44	172
,, (,, ,,)	,, ,, ,,	5	1 0	96 ⅄	30·99	...
,, (Clare House)	J. Rock, Esq.	8	1 0	125 ⅄	30·72	...
D Ashford (Westwell)	Rev. H. H. D'Ombrain	5	1 0	293 ⅄	31·79	184
Edenbridge (Falconhurst)	J. G. Talbot, Esq., M.P.	5	1 0	400 L	32·66	185
D† Maidstone (Hunton Court)	Mr. P. Goddard	8	0 6	80 T	28·40	182
Sevenoaks (Ide Hill)	J. Frost, Esq.	5	1 0	700 T	32·93	220
Maidstone (Tovil House)	J. Barcham Green, Esq.	8	1 0	80	28·85	165
D ,, (Lower Tovil)	L. Green, Esq.	5	1 0	30	27·49	155
D ,, (Museum)	M. A. Adams, Esq.	5	0 6	46	27·89	122
Charing (Otterden)	Rev. W. A. Paxton	5	1 0	507 ⅄	36·30	...
†Sandwich (Walton House, Eastry)	Colonel Rae	5	2 10	55 T	23·87?	...
Sheldwich	Rev. B. S. Malden	5	1 0	250 T	33·38	156
D† Selling (Harefield)	E. Neame, Esq.	5	2 6	217 T	33·91	208
D ,, (Gosmere)	W. Butcher, Esq.	5	1 0	255	31·94	185
D Canterbury (Burgate Street)	B. Rigden, Esq.	5	9 6	58 ⅄	29·32	177
,, (Harbledown)	Miss Metcalfe	5	1 6	165 ⅄	28·06	182
D ,, (Old Tree, Hoath)	G. Rammell, Esq.	8	2 0	113	24·51	142
†Seven Oaks (River Hill)	J. T. Rogers, Esq.	8	4 0	535 ⅄	28·50	147
D ,, (Rockdale)	N. Clode, Esq.	5	3 0	470	30·89	201
D ,, (Clare Bank)	J. M. Clabon, Esq.	5	4 0	540 T	30·79	171

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
KENT—(*con.*)						
D†Seven Oaks (Riverhead Vic.) ...	Rev. J. M. B. Murdoch	5	0 6	300 T	32·69	167
D Westerham (Betsom's Hill)	Baldwin Latham Esq CE	5	1 0	811 ⊼	35·72	193
Aylesford (Preston Hall)	Mr. A. Waterman... ..	8	1 6	...	27·73	...
D Faversham (Hernhill)	A. J. Alexander, Esq..	5	0 4	...	28·29	158
Ospringe (Lorenden)	W. C. Stunt, Esq.....	5	1 2	...	31·99	147
D Stourmouth.....	Rev. R. Drake	5	1 0	12 T	26·84	111
D Farnborough (Leaves Green) ..	Baldwin Latham Esq CE	5	1 0	534 ⊼	28·59	143
†Ramsgate (The Vale)	M. Jackson, Esq.	5	1 0	90 T	25·25	161
Birchington (Thor)	Major Bell	5	1 0	70	27·03	...
D ,, ...	E. S. Lendon, Esq.....	5	2 0	90	26·77	150
Chatham	The Meteor. Council....	...	...	...	24·61	160
Rochester (Knights Place)	J. Pye, Esq.	5	2 6	320	28·74	...
D†Margate (Renfrew Villa)	T. Twyman, Esq.	5	1 0	50 T	26·55	187
D ,, (Apsley House)	J. Stokes, Esq.	5	1 0	84 L	26·20	182
D Beckenham (West Wickham) ...	Baldwin Latham Esq CE	5	1 0	230	26·50	187
Bickley (Highfield)	J. Batten, Esq.	5	1 2	285	26·61	...
D†Beckenham (Foxgrove).....	Percy Bicknell, Esq....	5	0 5	142 ⊼	24·87	162
D† ,, (,,).....	,, ,, ,, ...	5	4 0	145 ⊼	24·05	153
D†Eltham Green	E. J. C. Smith, Esq. ...	5	1 0	80 T	25·02	...
D Lee (Blessington Road).....	J. Grant, Esq., C.E. ...	10	4 9	49 ⊼	27·07	170
Blackheath.....	J. Glaisher, Esq., F.R.S.	8	0 5	150	28·27	175
Greenwich (Royal Observatory)..	W. H. Christie, Esq. F.R.S	8	0 5	155 T	25·18	180
D Deptford (Pumping Station).....	Sir J. W. Bazalgette, CE	10	0 4	18 ⊼	28·05	172
Erith (Crossness)	,, ,, ,, ...	14	0 6	16 ⊼	25·71	181
,, (,,)	,, ,, ,, ...	14	0 6	24 ⊼	27·17	181
,, (,,)	,, ,, ,, ...	11	0 6	6 ⊼	28·43	181
WEST SUSSEX.						
D Littlehampton (Surrey House)...	G. Neame, Esq.	5	1 8	20 T	31·77	166
D†Worthing (Bedford Row).....	W. J. Harris, Esq. ...	8	1 0	18 ⊼	32·35	180
,, (,, ,,)*monthly*	,, ,, ,, ...	5	1 0	18 ⊼	33·30	...
D ,, (Broadwater Road)...	C. Kelly, Esq., M.D....	5	1 0	25 ⊼	32·70	191
D Arundel (Yapton)	W. A. Hounsom, Esq..	5	1 0	24 ⊼	33·33	187
,, (,, Drove Farm).	,, ,, ,, ...	5	1 0	14 T	32·02	184
D West Thorney	F. Padwick, Esq.	5	0 10	10	26·82	154
Chichester (Westgate Meadow)...	Dr. Tyacke.....	8	0 6	40	31·13	...
D Arundel (Patching)	J. Drewitt, Esq.....	5	1 0	180	35·57	193
D ,, ...	R. Holmes, Esq.	8	3 6	86	32·56	145
,, (Dale Park).....	Mr. E. Sandford	11	3 5	316 ⊼	40·57	144
D†Steyning.....	Col. Ingram	5	1 0	80 T	37·37	164
Chichester (Eartham House) ...	Sir P. Milbanke, Bt....	3	4 6	230 ⊼	33·27	...
,, (West Dean)	F. Bower, Esq.	5	3 6	180 T	40·74	187
,, (Singleton Rectory)...	Rev. F. A. Bowles.....	5	1 0	240	42·55	117
† ,, (Chilgrove)	J. W. Woods, Esq. ...	5	0 6	284 T	35·71	...
†Petworth Rectory	Rev. C. Holland.....	5	3 0	190 ⊼	35·69	145
†Horsham (Leonardslee)	Mr. Ford.....	5	1 6	273 T	34·35	...
D Midhurst (Lynch)	E. Eames, Esq.	5	0 6	160 ?	45·31	...
D Horsham (Albion Terrace)	R. Sheppard, Esq.....	6	5 0	150 ⊼	29·30	190
,, (Compton's Lea)	T. W. Cowan, Esq. ...	5	4 0	253 T	31·30	192

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
EAST SUSSEX.						
Beachy Head	Miss W. L. Hall	5	1 0	515 T	28·29	...
,, ,,	,, ,, ,,	5	1 0	495 T	30·72	...
D†Eastbourne (The Gore)	,, ,, ,,	5	1 0	85 T	36·02	199
D ,, (Osborne House)	,, ,, ,,	5	4 0	15 B	36·78	190
D† ,, (Cemetery)	,, ,, ,,	5	4 0	160 ⅄	38·08	165
D†Brighton (The Steyne)	Dr. R. P. B. Taafe	5	1 0	39 T	35·03	190
D† ,, (St. James' Street)	E. Rowley, Esq.	5	1 0	37 ⅄	38·35	195
,, (West)	Rev. E. W. Holland	5	1 9	105	31·66	...
D ,, (Buckingham Place)	F. E. Sawyer, Esq.	5	5 0	206 ⅄	32·02	190
D ,, (Blatchington Road)	J. Park, Esq.	8	0 6	...	35·21	186
D† ,, (W. W., Lewes Road)	Mr. W. Insell	5	3 8	...	37·42	193
,, (,, Goldstone Bottom)	Mr. J. Baker	5	0 10	140 ⅄	35·97	...
D St. Leonard's (Carisbrooke Road)	H. Colborne, Esq.	5	1 0	117 ⅄	33·53	192
D ,, (The Grove)	W. B. Young, Esq.	5	1 1	110 T	34·20	156
D†Hastings (The Hollies)	A. H. Wood, Esq. C.E.	8	3 0	100 ⅄	37·86	209
D ,, (Buckshole)	W. Andrews, Esq.	8	0 8	106	34·58	169
,,	The Meteor. Society	...	...	...	32·44	182
D Hailsham	Rev. F. Clyde Harvey	5	1 0	105	39·71	166
D†Falmer	R. R. Verrall, Esq.	5	1 6	312 ⅄	40·42	143
D Lewes (Iford)	A. Hillman, Esq.	5	1 0	33 T	38·02	204
† ,, (Glynde Place)	Mr. J. McLeod	5	2 9	49 T	39·19	174
†Hastings (HighBeechHollington)	Col. Lewis	5	1 0	320 T	30·81	180
D ,, (The Firs, Ore)	C. M. Murray, Esq.	8	1 0	408 B	35·85	...
D†Poyning (Dyke House)	Mr. W. Thacker	5	1 6	680	38·47	202
D Winchelsea	Mr. Budden	5	1 0	110 T	33·19	186
D ,, (The Friars)	Miss Stileman	5	1 1	115 T	29·82	189
D Warbleton Rectory	Rev. G. E. Haviland	5	1 8	182 ⅄	39·33	183
D Newick (Ketches)	Capt.G.RuckKeene,RN	8	0 7	192 T	30·20	157
D†Uckfield	C. L. Prince, Esq.	8	0 8	200 B	35·90	211
Rye (Peasmarsh)	Hon. R. Henley Eden	5	1 0	180	32·49	126
D†Hayward's Heath Asylum	Rev. T. E. Crallan	5	1 0	281	31·08	192
D†Maresfield (Forest Lodge)	Capt. W. Noble	8	1 2	247 ⅄	36·39	222
D Cuckfield (Borde Hill House)	Mr. R. Inglis	5	3 0	270 B	33·42	181
D Mayfield (Woodleigh)	Mrs. Lonsdale	8	1 0	520	35·60	194
D†Crowborough (The Observatory)	C. L. Prince, Esq.	8	0 8	777 ⅄	41·18	174
D Wadhurst (Lower CousleyWood)	F. Wilkin, Esq.	5	1 0	410	37·26	196
Lamberhurst (Scotney Castle)	E. Hussey, Esq.	5	4 3	202 T	30·66	...
Frant (Eridge Castle)	Mr. J. Rust	8	1 0	400	40·76	...
Forest Row (Ashdown Cottage)	H. J. Slack, Esq.	8	3 7	386 T	32·83	...
Worth Rectory	Rev. G. W. Banks	5	4 6	309 ⅄	33·22	173
East Grinstead	W.V.K.Stenning, Esq.	5	1 3	356 ⅄	32·28	170
,, ,,	H. Padwick, Esq.	8	0 10	350 T	34·36	145
HAMPSHIRE.						
ISLE OF WIGHT.						
D†St. Lawrence	Rev. C. Malden	5	1 0	75 ⅄	32·73	190
Ventnor (Consumption Hospital)	Mr. H. Sagar	5	1 0	75 T	32·67	185
D Sandown (Belgrave House)	W. E. Green, Esq.	5	1 0	105	36·67	157

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which 01 or more fell.
			ft. in.	feet.	inches.	
HAMPSHIRE—(*con.*) ISLE OF WIGHT—(*con.*)						
D Newport	Rev. E. W. Watts	5	1 0	...	34·26	184
D Ryde (St. Helens)	H. H. Freeman, Esq.	8	1 3	7	25·76	140
,,	Mr. T. S. Flower	12	7 6	17 T	33·27	...
D† Osborne	J. R. Mann, Esq.	8	0 8	172 ⅄	30·13	170
Hurst Castle	The Meteor. Council	8	0 11	9	32·75	199
Bournemouth (Tregen)	Adl. Sir B. J. Sullivan	5	1 0	134	37·65	160
Christchurch (South Bourne)	Dr. Compton	5	0 6	90	30·82	186
D ,, (Mudeford)	F. H. D. Eyre, Esq.	5	0 3	15 L	28·30	197
,, School	E. Evans, Esq.	6	4 6	15 ⅄	34·13	213
Lymington (Wainsford)	H. Fawcett, Esq.	5	1 0	58 ⅄	32·79	153
Portsmouth	The Meteor. Society	5	1 0	20	29·28	197
D ,, (Closewood, Cosham)	O. Philpott, Esq.	5	0 9	125 T	33·09	164
D Southampton (Cadland)	J. Laurie, Esq.	8	4 6	52 T	34·30	212
,, (Netley)	Prof F. de Chaumont FRS	8	0 5	37 ⅄	31·02	192
,, (Eling House)	W. C. Spooner, Esq.	5	1 3	15	33·29	...
,, (Ordnance Surv. Off.)	Major-Gen. Cooke, C.B.	5	1 0	79 ⅄	34·03	184
D Botley (Moorhill, Shedfield)	Adl. Sir T. S. Pasley, Bt.	8	1 2	160 ⅄	33·27	197
D Southampton (Westend)	C. Purrott, Esq.	5	2 0	244 T	35·53	195
,, (Millbrook)	Rev. C. Parkin	5	4 0	22 ?	34·15	190
D* ,, (Highfield) *Snowdon*	Rev. H. Garrett	5	1 0	130 ⅄	32·89	215
,, (,,) *mthly.*	,, ,, ,,	5	1 0	130 ⅄	33·69	...
D† ,, (Red Lodge)	R. C. Hankinson, Esq.	5	0 6	217 T	30·92	188
,, (,, ,,) *mthly.*	,, ,, ,,	5	0 6	200 T	34·12	...
D Fordingbridge	T. Westlake, Esq.	8	1 0	135 T	39·03	174
D Droxford Rectory	Rev. S. Bridge	5	0 8	180	36·10	190
Fordingbridge (Wood Green)	H. Hinxman, Esq.	5	1 2	140 ⅄	36·86	...
Romsey (Broadlands)	G. R. Kendle, Esq.	5	1 1	46 T	33·25	117
D Petersfield (Castle House)	A. Stowe, Esq.	5	1 0	216 T	40·45	177
,, (Liss Place)	G. E. Coryton, Esq.	7	0 7	250 ⅄	37·15	...
D Romsey (Michelmersh Rectory)	Rev. Dr. Merriman	5	1 6	273 ⅄	34·97	184
D Alresford (Cheriton Rectory)	Rev. A. Orr	5	2 6	240	34·64	175
D ,, (Ovington)	Rev. W. H. B. Stocker	5	5 1	225 T	36·31	198
,, (Arle Bury)	Capt. G. F. Marx	5	1 6	238 ⅄	34·23	138
D Alton (East Tisted Rectory)	Rev. F. Howlett	5	1 1	420 ⅄	39·44	195
D Winchester (Harestock)	Col. Knight	5	1 0	302 ⅄	34·49	189
Alresford (Swarraton Rectory)	Rev. W. L. W. Eyre	5	1 0	310 ⅄	34·18	170
D† Alton (Ashdell)	F. Crowley, Esq.	8	3 6	433 ⅄	37·09	162
Micheldever (Northbrook)	J. A. Caird, Esq.	5	1 1	270 T	34·80	...
Andover (Red Rice)	Mr. C. W. Learman	5	0 7	277 T	35·71	148
,, (The Knoll)	G. H. Westbury, Esq.	6	0 10	...	33·95	152
Whitchurch (North Litchfield)	T. W. Styring, Esq.	5	0 10	...	39·38	165
D Crondall (Warren Corner)	G. Wilkin, Esq.	5	1 3	575 ⅄	30·47	198
D Odiham Priory	Rt. Hon. G. S. Booth, M.P.	5	4 4	...	31·06	146
Dogmersfield Park	Sir H. B. Mildmay, Bt.	5	2 6	...	29·45	...
D Basingstoke (Chapel Hill)	G. Stephens, Esq.	5	1 0	328 T	32·62	195

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above SeaLevel feet.	Depth of Rain. 1882 inches.	Days on which ·01 or more fell.
HAMPSHIRE—(*con.*)							
†Rotherwick (Tylney Hall)	C. E. Harris, Esq.	5	0	8	330 T	28·94	...
D†Basingstoke(Sherborne St. John)	Rev. D. W. Chute	5	1	3	260 T	32·56	193
Kingsclere (Ramsdale)	Miss A. F. R. Fuller	5	1	0	341 ⅄	32·94	199
Hartley Grange	W. Walkinshaw, Esq.	6	1	0	220 ⅄	28·09	...
,, Wespall	Rev. J. C. Keate	8	0	9	233 ⅄	28·94	...
D Blackwater (Hurstleigh)	Miss Gibson	5	1	0	220 T	29·83	202
†Strathfield Turgiss	Rev. C. H. Griffith	5	1	0	196 ⅄	28·48	171
D† ,, ,,	,, ,, ,,	5	3	0	200 ⅄	26·63	179
,, ,,	,, ,, ,,	8	0	6	197 ⅄	27·52	...
†Strathfieldsaye	Mr. J. Bell	8	1	0	160 T	28·07	132
†Heckfield (Park Corner)	J. Martineau, Esq.	5	1	3	258 T	26·34	158
BERKS.							
D Reading (Beech Hill)	Rev. C. S. Turner	5	1	0	226 ⅄	28·72	189
Newbury (Greenham)	Capt. J. Ward, R.N.	5	1	0	260 L	33·68	204
,,	W. J. Cowper, Esq.	5	4	6	...	36·04	187
Hungerford (Denford Park)	G. C. Cherry, Esq.	5	1	2	430 T	38·41	204
Reading (Englefield)	R. Benyon, Esq.	5	1	1	...	36·48	186
D† ,, (Russell Street)	Dr. Workman	5	2	0	154 ⅄	29·32	183
,, (East Thorpe)	A. Palmer, Esq.	5	3	0	157 ⅄	27·31	169
D Newbury (Welford Park)	Mr. C. Ross	5	1	0	335 ⅄	39·23	219
,, (,, ,,)	,, ,,	5	1	0	341 T	39·02	219
D Lambourne	R. C. Mawley, Esq.	5	0	9	415 T	38·26	206
D East Ilsley	R. Osmond, Esq.	5	3	6	...	35·52	179
Maidenhead (Kimbers Cottage)	Mr. J. Silver	8	1	2	92 ⅄	34·45	...
,, (Lowood)	Major-Gen. Davies	8	1	0	...	29·80	159
Springlands [Henley-on-Thmes]	Rev. H. C. Sturges	6	1	0	350 ?	30·63	192
D Maidenhead (Cookham Vic.)	Rev. R. W. Rogers	5	1	3	90 T	29·31	198
Shrivenham (Ashbury Vic.)	Rev. H. Miller	5	1	0	479 ⅄	33·48	...
D Wantage (Letcombe Regis)	S. W. Silver, Esq.	5	1	0	...	36·40	198
D†Long Wittenham	Rev. J. C. Clutterbuck.	12	1	3	165 ⅄	34·58	173
Faringdon (The Elms)	W. Dundas, Esq.	5	1	0	340 T	35·97	192

DIVISION III.—SOUTH MIDLAND COUNTIES.

HERTS.							
D Southgate (The Lawns)	H. P. Church, Esq.	6	0	6	240 T	29·88	208
Rickmansworth	W. B. Butler, Esq.	5	1	0	...	33·65	...
Bushey Station	Mr. R. Savill	5	0	6	...	33·36	...
D Watford (Wansford House)	J. Hopkinson, Esq.	5	1	0	225 ⅄	33·57	199
D ,, (Watford House)	A. T. Brett, Esq., M.D.	8	1	2	240	35·44	190
D Broxbourne	G. J. Newbury, Esq.	5	1	0	...	25·89	193
†St. Albans (Gorhambury)	Mr. J. Thompson	6	2	6	375 T	37·06	170
Hoddesdon	A. C. McKenzie, Esq.	8	1	6	147	23·32	144
D Hemel Hempstead (Nash Mills)	Messrs.J Dickinson&Co.	12	3	9	237 T	35·22	188
Gt. Berkhampstead (High Street)	W. Squire, Esq.	8	1	5	370 B	35·31	172
,, ,, (Great Gaddesden)	Rev. W. TyrwhittDrake	8	1	0	426 ⅄	31·12	...

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	HERTS—(*con.*)						
	Hertford (Bayfordbury)	W. C. Baker, Esq.	8	0 4	250	27·64	177
D	,,	J. Woodhouse, Esq.	...	...	...	28·01	188
D	Tring (Cowroast)	H. Thomas, Esq., C.E.	10	4 2	345 L	34·60	163
	Harpenden (Rothamstead)	Messrs. Lawes & Gilbert	5	0 9	420 T	33·87	206
	,, (,,)	,, ,, ,,	8	0 9	420 T	32·91	187
	,, (,,)	,, ,, ,,	72x87	0 9	420 T	34·77	212
D	Ware	J. Muir, Esq., C.E.	12	3 0	114 T	27·57	119
D	,, (Fanham's Hall)	Miss Joyce Croft	8	0 8	235	28·36	191
D	Welwyn Rectory	Rev. C. L. Wingfield	5	0 4	228 T	30·38	198
D	Kensworth [Dunstable]	Miss Jones	5	1 0	630 B	32·46	176
D	Ware (Much Hadham)	T. W. Mott, Esq.	5	1 0	222 B	27·94	186
D	Welwyn (Datchworth Rectory)	Rev. J. Wardale	6	1 0	386 T	27·70	174
	Stevenage (Knebworth Rectory)	Rev. F. G. Jenyns	5	1 0	391 ⅄	32·92	195
	,,	Rev. J. O. Seager	8	2 0	319 L	29·48	184
D†	Hitchin	W. Lucas, Esq.	5	2 1	238 ⅄	29·24	197
	,, (High Down)	J. Pollard, Esq.	5	1 1	422 T	28·98	183
D	Buntingford (Throcking Rectory)	Rev. C. W. Harvey	5	1 0	484 T	27·92	193
	Royston (Therfield Rectory)	Rev. J. G. Hale	5	4 3	500 ?	29·61	170
D†	,,	H. Wortham, Esq.	8	0 6	269 ⅄	26·21	163
	BUCKINGHAMSHIRE.						
D	Slough (Langley)	R. H. Major, Esq.	8	0 10	85 T	26·87	166
	,, (,, Field)	,, ,, ,,	5	0 10	85 T	26·48	...
D	,, (Upton Park)	G. Bentley, Esq.	5	3 0	94 ⅄	28·64	168
	Greenlands [Henley-on-Thames]	Rt Hn. W. H. Smith M.P.	8	1 0	116	32·80	105
	High Wycombe	H. S. Wheeler, Esq.	8	0 9	225 ⅄	30·67	...
	Great Missenden	The late Mr. J. Begbie.	6	1 0	600 T	36·38	...
	Aylesbury (Serena Terrace)	J. Copcutt, Esq.	12	1 0	280 T	29·05	101
	,, (Mentmore)	Mr. J. Smith	5	1 6	...	28·12	...
D†	Winslow (Addington Manor)	E. Hubbard, Esq.	8	1 0	309 ⅄	35·37	194
D†	Buckingham (Adstock)	J. E. S. Weston, Esq.	5	0 9	350 T	35·03	182
†	,, (School Lane)	Mr. W. Walker	8	1 3	269 ⅄	32·09	162
	Stony Stratford (Thornton)	Mr. W. Sturdy	5	1 0	...	31·70	...
	Woburn Sands (Sandymount)	C. P. Stuart, Esq.	5	1 1	...	31·94	192
D	Newport Pagnell	R. Littleboy, Esq.	5	2 0	...	30·59	154
	Olney (Filgrave Rect.)	Rev. J. Tarver	8	0 8	285	31·86	...
	OXFORD.						
D	Whitchurch Rectory	Rev. J. Slatter	10	1 0	150 T	29·68	180
	Henley-on-Thames (Greys)	Rev. N. Pinder	5	1 8	370 T	32·03	...
D	,, ,, (Nettlebed)	G Norsworthy, Esq.	8	2 0	600	31·46	...
D	,, ,, (Assenton)	Mr. J. Ratty	5	1 0	281	38·19	189
D	,, ,, (Stonor Park)	Rt. Hon. Lord Camoys	5	1 0	400 T	37·93	189
	Burcote [Abingdon]	H. J. Hannam, Esq.	5	1 3	168	30·99	189
	Thame (Aston Rowant)	T. Taylor, Esq.	8	1 0	395 B	32·83	...
D	Oxford (Toot Baldon Vic.)	Rev. J. C. Ross	5	1 0	265	29·47	199
D†	,, (Mag. Coll. Laboratory.	E. Chapman, Esq.	5	1 0	186 ⅄	31·81	211
	,, (,, ,, ,,).	,, ,, ,,	5	33 11	223 ⅄	27·65	...

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	OXFORD—(*con.*)						
	Oxford (Radcliffe Observatory)	E. J. Stone, Esq., F.R.S.	8	1 8	209	31·48	191
D	,, (,, ,,)	,, ,, ,,	11	2 4	210 ⅄	31·74	158
	,, (,, ,,)	,, ,, ,,	10	22 0	230	30·57	157
	,, (,, ,,)	,, ,, ,,	10	112 0	322 ⅄	21·47	222
D	,, (Norham Road)	Rev. C. B. Mount	9	1 0	220 ?	33·32	170
	,, (Stanton St. John's)	J. Thomson, Esq.	5	1 7	399 ⅄	32·68	198
	Witney (Ringwood Farm)	Mr. J. W. Abraham	5	5 0	...	39·31	192
D	Woodstock (Wootton Rectory)	Rev. A. E. Robinson	5	1 1	356 ⅄	37·33	209
D	Bicester (Middleton Park)	Mr. B. Hope	5	2 6	...	35·32	195
	Chipping Norton (Kingham)	E. Lockwood, Esq.	5	3 6	442	41·24	...
D*	Bicester (Stratton Audley Park)	G. Glen, Esq.	5	2 5	381 ⅄	31·54	167
D	Banbury (Bloxham Grove)	Rev. G. Warriner	8	3 10	387 ⅄	38·36	190
D	,, (Cotefield, Bodicote)	T. E. Cobb, Esq.	8	2 0	383 ⅄	37·33	213
D†	,, (High Street)	T. Beesley, Esq.	6	7 0	330 ⅄	40·18	229
D	,, (Wroxton)	A. R. Tawney, Esq.	5	3 0	490 ⅄	39·45	210
	NORTHAMPTON.						
D	Kings Sutton [Banbury]	Mr. E. Good	5	1 0	400 B	36·08	194
	Brackley	Mr. E. Durran	8	6 10	400 T	40·56	142
	Towcester (Whittlebury)	W. S. Miller, Esq.	...	...	...	37·24	...
D	,,	Mr. J. Webb	5	1 0	...	35·29	190
	,, (Easton Neston)	Mr. E. Slarke	8	1 0	340 T	35·33	189
D	Daventry (Fawsley)	Lady Knightley	5	1 0	477 B	34·68	195
†	Weedon Beck	F. Capell, Esq.	5	4 0	265 T	35·30	150
D	Castle Ashby	R. G. Scriven, Esq.	5	1 0	265 T	34·20	183
D	Northampton (Little Houghton)	Mr. J. Brawn	5	2 4	...	32·58	183
	Weedon (Floore)	E. G. Loder, Esq.	5	1 2	280	36·03	171
D	Northampton (The Holly's)	Alderman Macquire	8	1 6	232	34·06	190
D	,, (Hazlewood Road)	H. Terry, Esq.	5	5 0	253	31·60	180
D	,, (Gold Street)	Mr. S. Law	5	6 6	230 ⅄	30·43	184
D	,, (Sedgebrooke)	C. Markham, Esq.	5	1 0	250 ?	35·17	197
D	,, (Althorp House)	C. S. Groom, Esq.	8	3 10	310 ⅄	32·87	183
	,, (Chapel Brampton)	E. Dowdall, Esq.	5	2 6	...	35·39	178
D	Wellingborough	E. Sharman, Esq.	5	0 2	...	36·16	207
D	Thrapstone (Hargrave)	J. L. Baker, Esq.	5	1 0	219 ⅄	33·53	163
D	Kettering	J. Wallis, Esq.	8	1 3	300 B	32·38	188
	Oundle (Pilton Rectory)	Rev. F. G. Hodgson	5	1 0	...	33·23	...
D	,, (Vine Cottage)	Mr. S. P. Holloway	5	1 0	...	31·83	164
	,, (Bramston House)	J. S. Clarke, Esq.	5	1 0	110 ⅄	31·30	153
D	Rockingham Castle	Mr. H. Watt	5	3 0	400 L	33·40	105
D	Peterborough (Springfield Ho.)	J. Whitwell, Esq.	8	2 0	50 L	29·95	137
D	Easton [Stamford]	C. Day, Esq.	5	1 0	278 T	32·02	203
D	Maxey Vic. [Market Deeping]	Rev. W. D. Sweeting	5	1 0	60 ?	31·90	200
	HUNTS.						
D	St. Neots (Tetworth Hall)	Mrs. Kaye	5	0 8	114 T	30·02	172
D	,, (Waresley Vicarage)	Rev. W. M. H. Elwyn	8	1 0	193 ⅄	27·06	166
	Godmanchester (Farm Hall)	G. I. Bevan, Esq.	8	0 8	30 ?	27·86	151

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1882 inches.	Days on which ·01 or more fell.
HUNTS—(*con.*)							
Huntingdon	Mrs. C. Margetts	5	0	4	52 T	30·98	174
Whittlesea Mere	R. Lunn, Esq.	8	1	0	...	31·12	...
BEDFORD.							
Luton	W. H. Leete, Esq.	5	1	0	344 T	30·62	192
Ampthill (Silsoe)	H. Trethewy, Jun., Esq.	5	1	2	214 T	29·95	204
,, (Wrest Park)	Mr. G. Ford	5	1	1	...	28·97	...
D†Aspley Guise (Oaklands)	E. E. Dymond, Esq.	5	1	0	433 T	29·20	182
D Stotfold [Baldock]	Dr. Swaine	5	0	9	220	24·48	195
Ampthill	Mr. J. Brown	5	1	0	310 T	31·15	167
,, (Millbrook)	Rev. S. G. Gillum	5	0	10	200 ?	31·29	167
Biggleswade (Old Warden)	Mr. G. R. Allis	8	1	2	...	27·97	131
,,	C. T. Newbery, Esq.	5	28	0	...	27·23	...
D Potton (Wrestlingworth)	H. J. King, Esq.	5	1	0	...	28·25	192
Cardington	Mr. J. McLaren	8	0	0	106	29·94	...
D ,, (*Staff gauge*)	,, ,,	12	3	6	109	28·84	173
D Sandy Rectory	Rev. J. Richardson	5	0	7	...	28·80	140
D ,, (The Lodge)	A. W. Peel, Esq., M.P.	5	1	0	...	29·01	179
Bedford	D. Robic, Esq.	5	0	4	115 T	28·42	155
,, (Clapham Park)	J. Howard, Esq., M.P.	8	1	0	220 ⅄	29·41	...
Tempsford Hall	Col. W. Stuart	5	0	9	80 T	28·27	181
Bedford (Milton Ernest)	F. Newbery, Esq.	5	5	0	130 ?	28·29	140
CAMBRIDGE.							
D†Odsey Grange [Royston]	H. G. Fordham, Esq.	5	1	0	264 ⅄	24·14	181
,, [,,]	E. O. Fordham, Esq.	5	0	10	257 ⅄	22·93	...
D†Guilden Morden [,,]	J. G. Johnson, Esq.	5	1	2	106 ⅄	26·44	179
†Abington Pigotts [,,]	Miss Foster	8	0	6	130 B	26·11	179
D Pampisford Hall	Mr. Morley	5	1	0	113 ⅄	25·81	189
,, ,,	,, ,,	5	1	0	60	26·55	...
D Granchester Mill	J. Nutter, Esq.	5	5	0	31 ⅄	27·38	185
D Cambridge (W.W.Cherryhinton)	H. Tomlison, Esq., C.E.	5	1	0	35 ⅄	25·47	208
D ,, (Beech House)	J. Nutter, Esq.	8	4	0	40 ⅄	25·18	175
D ,, (Sidney Street)	Mr. W. E. Pain	8	60	0	92 ⅄	24·00	215
D ,, (Trinity College)	J.W.Glaisher, Esq.FRS	8	0	6	40	26·44	203
D Hardwicke	Rev. J. S. Brown	5	0	7	...	27·26	105
D†Cambridge Observatory	Professor Adams, F.R.S.	5	1	0	85 ⅄	27·48	194
,, ,,	,, ,, ,,	8	1	0	84 ⅄	27·35	194
Quy Hall	Mrs. Clement Francis	5	0	5	...	26·10	195
D Ely (Stretham)	Mr. H. Walters	9	4	9	...	26·82	163
D ,, (Littleport Vicarage)	Rev. Canon Hopkins	5	1	0	50 ?	28·62	185
D Chatteris (Aylesby House)	A. A. Ruston, Esq.	8	0	6	...	28·84	173
D ,, (The Priory)	H. F. Fryer, Esq.	5	0	7	45	30·20	178
,, (Slade Farm)	Mr. T. Triplow	8	13	0	44 ⅄	27·58	...
,, (Horseway Lock)	R. Lunn, Esq.	8	1	0	...	?21·19	...
D March	R. Dawbarn, Jun., Esq.	5	1	0	...	30·09	142
,,	R. Lunn, Esq.	...	...		...	28·78	...
,,	A. Grounds, Esq.	...	2	0	...	30·39	...

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
CAMBRIDGE—(*con.*)						
Stanground Sluice	R. Lunn, Esq.	8	1 0	..	28·80	...
* March (Stags Holt)	W. C. Little, Esq.	5	1 0	15 ?	30·30	...
Upwell (Marmont Priory Lock)	R. Lunn, Esq.	8	1 0	...	28·07	...
D ,, (Euximoor House)	H. West, Esq.	5	0 8	15 ?	29·39	175
Wisbech (Coldham Hall, Elm)	H. J. Little, Esq.	5	1 0	15	29·07	181
D ,, (Bank House)	A. Peckover, Esq.	8	0 8	6	30·44	190
† ,, (Observatory)	Mr. W. J. D. Ward	8	0 6	10 T	29·56	121

DIVISION IV.—EASTERN COUNTIES.

ESSEX.						
Canning Town [London]	Lewis Angell, Esq., C.E.	24	31 6	40 ⅄	20·61	160
D Shoeburyness	Capt. O'Callaghan, R.A.	8	7 0	18	22·55	...
†Barking (Loxford Hall)	Mr. J. Douglas	5	1 0	...	25·71	160
D Southend	G. Lingwood, Esq.	8	1 0	112 ⅄	22·57	140
Romford (North Ockendon Rect.)	Rev. R. T. Crawley	5	1 2	100 T	25·29	160
D Barking (Little Ilford)	Rev. A. Shadwell	10	1 0	30 T	24·73	153
D Leyton Observatory	C. G. Talmage, Esq.	8	1 3	97 B	26·44	...
Romford (Normanhunt)	E. C. Allam, Esq., C.E.	8	1 6	93 ⅄	25·07	...
D Walthamstow (Prospct Hill Ldge)	J. E. Goodchild, Esq.	5	1 2	140 T	26·79	...
D Woodford (The Harts)	Miss Spicer	5	3 0	200 T	28·32	...
D Buckhurst Hill (The Elms)	F. W. Cory, Esq.	8	0 10	228 B	25·27	180
Brentwood (Sawyer's Hall Farm)	Rogers Field, Esq., C.E.	5	1 0	270 T	27·77	..
Maldon (Norton Hall)	C. Clarke, Esq.	5	2 6	130 T	24·06	131
Waltham Abbey (Gunpdr. Factry)	The Superintendent	8	4 0	82 L	25·15	131
Epping (The Hemnalls)	J. Nicholl, Esq.	8	0 8	345	36·31	162
Bradwell-on-Sea (Down Hall)	R. Page, Esq.	5	1 2	20	25·17	...
Chelmsford (Great Baddow)	H. Corder, Esq.	5	0 6	...	27·48	...
D ,, (Writtle)	E. Rosling, Esq.	5	1 0	140 T	26·00	136
,,	F. Chancellor, Esq.	8	1 0	86 ⅄	27·08	148
D Harlow (Moor Hall)	Mr. Huntley	8	1 6	273 ⅄	26·12	171
D ,, (Sheering)	Rev. Canon Hill	5	1 0	214 ⅄	26·92	173
Witham (Little Braxted Hall)	J. Taber, Esq.	5	1 0	50	26·43	149
D Dunmow (High Roding)	Rev. E. Maxwell	5	1 0	252 T	25·44	197
,, (New Street)	B. H. Warner, Esq.	12	1 6	250	27·38	...
Stanstead [Bishops Stortford]	Harford Green, Esq.	5	1 0	240 T	31·85	143
Braintree (Bocking)	S. Tabor, Esq.	4	2 0	200 T	29·91	139
,, (,, Place)	S. Courtauld, Esq.	5	2 0	212 ⅄	31·48	177
Earls Colne (Chalkney House)	H. F. Hills, Esq.	5	1 0	180 T	27·96	170
D Manningtree (Lawford)	O. Bendall, Esq.	5	1 0	...	28·43	176
D Dedham (Lower Park)	W. H. Penrose, Esq	8	1 0	49 ⅄	28·39	151
D Saffron Walden (Newport)	Rev. G. F. Tamplin	5	2 0	80 ?	27·50	167
D ,, ,,	J. G. Bellingham, Esq.	5	1 0	180 ⅄	29·11	197
SUFFOLK.						
D Nayland (Tendring Hall)	Mr. G. L. Rushmore	8	0 8	135 ⅄	29·50	104
D Stutton (Alton Hall)	J. South, Esq	5	0 6	...	28·26	127

DIVISION IV.—EASTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge			Depth of Rain.	Days on which '01 or more fell.
		Diameter	Height Above Ground	Height Above SeaLevel	1882	
			ft. in.	feet.	inches.	
SUFFOLK—(*con.*)						
Ipswich (Orwell Park)	Mr. J. Wallis	8	1 0	60 ⅄	30·27	186
Hadleigh (Boxford)	Rev. J. Byng	8	0 8	...	28·42	157
,, (,,) *monthly*	,, ,,	8	0 10	...	28·69	...
Ipswich (Belstead Hall)	A. Harwood, Esq.	8	9 0	120 ⅄	28·01	137
,, (,, ,,)	,, ,, ,,	5	9 0	120 ⅄	27·78	...
,, (Bishop's Hill)	G.A.Biddell, Esq., C.E.	5	1 0	104 ⅄	29·48	...
Lavenham Hall	W. Biddell, Esq.	5	2 0	...	29·83	...
Woodbridge (Bank House)	S. Alexander, Esq.	5	1 0	...	30·64	164
,, (The Grange)	W. P. T. Phillips, Esq.	...	...	...	30·21	...
,, (Rendlesham Hall).	RtHonLrd.Rendlesham	5	1 9	88 ⅄	30·10	171
Ash Bocking Vicarage	Rev. M. B. Cowell	5	7 3	231 T	28·02	144
Stowmarket (Violet Hill)	F. Long, Esq.	5	2 0	86	28·87	105
,, (Wetherden Rec.)	Rev. C. J. Goodhart	8	0 6	185 ⅄	28·90	178
Bury St. Edmunds (Drinkstone Pk)	Mr. G. Palmer	8	1 2	...	30·28	171
Framlingham (Mount Pleasant)	Mr. R. Whitehead	5	1 3	...	33·54	155
Saxmundham (Carleton Hall)	Mr. Briggs	8	5 0	50 T	34·18	199
Bury St. Edmunds (Abbeygate St.)	F. Summers, Esq.	5	65 0	...	25·32	154
† ,, ,, (Westley)	R. Burrell, Esq.	5	1 0	...	30·05	...
† ,, ,, (Barton Hall)	Mr. W. Allan	5	1 0	...	30·55	197
† ,, ,, (Culford)	Mr. J. Smith	5	1 6	...	31·08	202
Ixworth (Walsham-le-Willows)	Miss M. C. Martineau	5	1 0	...	33·18	175
Stradbroke	J. T. Catchpole, Esq.	5	1 6	...	36·61	185
,,	Rev. Dr. Tate	5	2 2	...	33·42	...
Botesdale (Rickinghall Rect.)	Rev. T. F. Lloyd	8	2 0	...	30·24	162
†Ixworth (Barningham)	W. Lingwood, Esq.	8	1 0	25 ?	31·60	...
Halesworth	Miss Burleigh	5	1 6	60 L	32·79	141
Weybread Vic. [Harleston]	Rev. J. H. White	8	...	...	31·73	172
Beccles (Sotterley Hall)	Col. St. J. Barne, M.P.	5	1 1	...	35·58	182
,, (Ellough Rectory)	Rev. S. W. Earnshaw	5	1 1	103 ⅄	33·69	178
†Lowestoft (Gisleham)	Rev. H. Jodrell	5	1 4	36 T	31·42	.
† ,, (Carlton Colville)	G. Edwards, Esq., C.E.	8	0 9	6 T	32·44	...
,, (Kirkley)	H. E. Miller, Esq.	5	2 0	58 ⅄	31·31	158
,, (Belle Vue Park)	S. H. Miller, Esq.	5	1 0	86	30·37	168
,, (,, ,, ,,)	,, ,, ,,	8	1 0	86	30·62	...
† ,, (Somerleyton Hall)	Mr. Rix	8	0 9	60 T	31·23	143
,, (,, Rect.)	The Meteor. Society	8	1 0	50	31·45	177
NORFOLK.						
Diss	T. E. Amyot, Esq.	5	1 0	96	33·23	164
Harleston (Rushall Vicarage)	Rev. C. Gape	5	1 1	123 T	34·55	193
†Geldeston [Beccles]	E. T. Dowson, Esq.	5	1 0	38 ⅄	30·70	195
,, [,,]	,, ,, ,,	8	1 0	38 ⅄	30·45	...
,, [,,]	R. Dashwood, Esq.	5	1 0	49 B	31·49	179
,, Rectory [Beccles]	The late Rev. D. Gillett	5	1 0	61 ⅄	31·94	172
Wymondham (Mulbarton)	Rev. Canon Du Port	...	...	...	31·00	...
Watton	,, ,, ,,	...	...	...	32·67	...
Downham Market (W. Dereham)	Mr. C. Blanchfield	5	0 11	...	30·91	203
Stoke Ferry (Wereham)	Rev. Canon Du Port	...	...	...	31·24	...

DIVISION IV.—EASTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which 01 or more fell.
			ft. in.	feet.	inches.	
NORFOLK—(*con.*)						
Swaffham (Pickenham Hall) ...	E. A. Applewhaite Esq.	5	1 0	160†	32·77	186
Outwell Sluice	R. Lunn, Esq.	9	...	...	27·91	...
Yarmouth (Sailors' Home)	The Meteor. Council ...	8	4 0	12	30·29	183
D ,, (Dene Side)	W. H. Willis, Esq. ...	8	1 0	28 ⅄	33·16	177
,, (Halvergate Hall) ...	Rev. Canon Du Port ...	5	3 3	48 ⅄	29·17	...
Norwich (Eaton).....	J. Pymar, Esq.	6	1 0	84 †	33·75	...
D ,, (Postwick)	Rev. W. Vincent	5	1 0	20 ?	32·07	163
D ,, (Carrow House)	Mr. H. Jones	5	4 0	30	34·69	146
† ,, (Thorpe St. Andrews) ..	Rev. Canon Du Port ...	5	1 0	137 †	37·24	...
,, (St. Catherine's Close) ..	Mrs. Evans.....	5	2 3	120	34·97	174
D ,, (Essex Street)	F. Dix, Esq.	9	2 6	85 †	33·34	157
Acle.....	Rev. R. W. Kennion...	8	0 9	40 ⅄	28·79	111
D*Swaffham (Grammar School) ...	C. J. Drury, Esq.	5	1 10	242 ⅄	34·81	187
D ,, ...	W. H. Plowright, Esq.	5	5 0	250 ⅄	33·91	180
†Mattishall	Rev. Canon Du Port ...	8	1 2	165 ⅄	34·62	199
D†Norwich (Honingham Hall)	Lady Bayning	5	0 6	110 †	33·89	197
D ,, (Cossey)	H. Culley, Esq. ..	5	1 0	...	32·26	179
D Sprowston (Oak Lodge).....	T. C. Hardy, Esq. .	5	1 0	...	33·29	189
D†Filby	Mr. Crisp	5	2 4	11	29·62	132
East Dereham.....	G. H. Cooper, Esq. ..	8	3 0	161	33·07	174
,, ,, ...	,, ,, ,, ...	5	3 0	161	32 30	...
,, ,, ...	Rev. Canon Du Port ...	...	...	..	32·35	...
Drayton	,, ,, ,, ...	5	1 2	...	32·50	..
Swaffham (Dunham).....	,, ,, ,, ...	...	...	...	34·85	...
Yarmouth (Rollesby)	Major-Gen. Sarel, C.B.	8	1 2	...	30·17	136
St. Germans (Outlet Syphons)...	R. Lunn, Esq.	8	...	...	26·40	...
D Terrington	J. T. Seccombe, Esq, M.D	5	1 0	15 ⅄	30·85	167
D Felthorpe	Major Bourchier.....	5	2 0	75	32·53	150
D Reepham (Hackford).....	W. D. Bircham, Esq...	5	1 0	...	30·88	187
Cawston	Rev. T. H. Marsh	5	1 0	120 †	31·90	197
North Walsham (Worstead).....	Mrs. Cooke	5	0 9	...	29·01	149
,, ,, (Dilham)	Rev. Canon Du Port ...	...	...	...	29·60	...
†Lynn (Hillington Rectory)	Rev. H. Ffolkes.	8	1 0	89 ⅄	33·31	199
D† ,, (,, School)	,, ,, ...	5	3 6	94 ⅄	33·25	198
North Walsham (Knapton)	Rev. Canon Du Port ...	...	...	...	33·71	..
Hindringham	S. Cushing, Esq.....	5	1 0	...	32·56	188
Holt (Letheringsett Hall).....	W. H. C. Hardy, Esq..	8	1 0	...	31·57	137
Cromer (Colne Lodge)	J. Cooper, Esq., M.D...	5	1 0	100 ·	30·52	166
Holkham.....	J. Davidson, Esq.	8	0 0	35	28·17	151
D ,, ...	,, ,, ...	12	4 0	39 L	27·81	151
D Hunstanton Hall	Mr. Nisbet	11	3 8	60 ⅄	29·02	...
D Wells-next-the-Sea	H. R. Rump, Esq.....	5	1 0	16 †	29·28	196

DIVISION V.—SOUTH-WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WILTS.						
D Landford	J. R. Wigram, Esq. ...	5	1 10	165 ⅄	35·29	215
D† Salisbury (Alderbury)	Rev. R. S. Hutchings...	5	0 8	263 ⅄	34·67	181
D† ,, (West Dean)	Rev. W. L. W. Eyre...	5	1 0	137 B	43·37	203
,, (Wilton House)	Mr. Challis	8	0 5	180 ⅄	39·29	217
Mere	Rev. T. A. Preston ...	5	1 0	...	46·12	213
,, Down	,, ,, ,, ...	5	1 0	600 ?	45·01	217
Hindon (Chicklade)	,, ,, ,, ...	5	0 11	...	46·48	217
Winterslow	,, ,, ,, ...	5	1 0	...	33·61	176
Maiden Bradley	Henley Eden, Esq.	8	0 10	630	48·89	...
Codford (Bapton)	Rev. T. A. Preston ...	5	1 0	301 T	40·09	184
Warminster (Rye Hill)	,, ,, ,, ..	8	2 0	450	43·04	218
Amesbury	,, ,, ,, ...	5	1 0	...	32·20	187
Salisbury Plain (Chitterne House)	R. Hayward, Esq.	11	4 0	380 ?	35·97	208
Warminster	E. Cruse, Esq.	5	1 0	387 ⅄	40·83	215
,, (Downside)	W. J. Stent, Esq.	8	4 0	393	44·03	217
Ludgershall	Rev. W. H. Awdry ...	8	0 8	422 ⅄	38·41	210
,, (Everleigh)	Rev. T. A. Preston .	5	1 2	590	43·32	211
,, (Collingbourne Kingston).	Baldwin Latham Esq CE	5	1 0	400 ?	43·56	195
Market Lavington	Rev. T. A. Preston ...	5	1 0	...	38·84	213
D Trowbridge (Steeple Ashton Vic.)	Rev. A. O. Hartley ...	5	1 0	240 T	33·47	196
,, (Wingfield)	Rev. T. A. Preston ...	5	1 0	150	38·69	212
D ,, (Rodney House)	W. J. Mann, Esq.	5	1 1	140 ⅄	36·32	204
D Pewsey	Mr. J. P. Robins	5	1 0	...	37·53	210
Bradford	Rev. T. A. Preston ...	5	1 0	...	38·42	203
,,	,, ,, ...	5	1 0	...	41·15	196
D Trowbridge (Holt)	Major F. B. Gritton ...	5	1 2	120 T	38·90	217
Devizes (Southgate House)	B. H. Cunnington, Esq.	8	0 10	436 T	41·60	222
D ,, (Bishop's Cannings)	Rev. C. W. Hony	5	1 0	446 ⅄	41·50	216
Buttermere	Rev. T. A. Preston ...	5	4 9	...	39·51	206
Burbage Wolfhall	,, ,, ,, ...	8	1 0	528	42·25	175
Shalbourne	,, ,, ,, ...	5	1 0	...	42·66	190
Durley	,, ,, ,, ...	5	4 0	600 ?	36·85	208
Great Bedwyn	,, ,, ,, ...	5	1 0	...	43·17	193
Lye Hill	,, ,, ,, ...	5	1 0	...	38·74	210
Devizes (Shepherd's Shore)	,, ,, ,, ...	5	1 6	...	41·71	211
D Chippenham (Lacock)	Miss Awdry	5	0 11	250 ?	40·84	215
D† Marlborough (The Green)	Rev. T. A. Preston ...	5	1 0	472 ⅄	43·79	206
,, (,,)*monthly*	,, ,, ,, ...	5	1 0	472 ⅄	43·27	...
D ,, (Mildenhall)	Rev. C. Soames	5	1 0	456 ⅄	42·09	205
Corsham	Rev. T. A. Preston ...	5	1 0	350 ?	41·79	206
D Calne (High Street)	Mr. H. Wilkins, Junr.	5	3 6	244	38·01	224
D ,, (Compton Bassett)	Mr. J. Allen	8	1 0	400 T	38·51	207
Ramsbury	Rev. T. A. Preston ...	5	1 0	411	39·82	205
Ogbourne Maizy	,, ,, ,, ...	5	1 0	...	45·97	200
Broad Hinton	Rev. J. A. Lloyd	5	3 6	633	42·35	206
Wootton Bassett	Rev. T. A. Preston ...	5	1 0	...	38·62	209
D Swindon, New	J. H. Preece, Esq.	8	0 4	378	39·73	212
,, (Pen Hill)	H. Arkell, Esq.	5	0 10	400	37·73	201

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which 01 or more fell.
			ft. in.	feet.	inches.	
WILTS—(*con.*)						
Malmesbury	Rev. T. A. Preston	...	1 0	...	39·00	190
D Thames' Head [Cirencester]	J.H.Taunton,Esq.,C.E.	8	4 0	350 ⅄	44·05	183
DORSET.						
Swanage	The Meteor. Society	...	1 0	178	34·92	172
D Weymouth (Langton Herring)	Rev. C. H. Gosset	8	1 0	200 ?	36·28	204
D† ,, (Osmington Lodge)	Col. Hall	5	1 0	225 B	40·70	195
†Abbotsbury	Mr. A. Dight	5	3 6	150	38·14	...
D Wareham (Castle Gardens)	S. W. Bennett, Esq.	5	3 2	25 ?	36·75	183
D Westbourne [Bournemouth]	E. B. K. Welch, Esq.	5	0 9	126	36·59	198
D Poole	F. Styring, Esq.	5	1 0	6	35·38	161
D Bere Regis (Bloxworth)	Col. Cambridge	5	2 0	150 ?	39·63	...
Wimborne (West Boro)	W. Wyke Smith, Esq.	5	1 6	66 B	44·62	116
D Beaminster Vicarage	Rev. Canon Codd	5	0 9	...	47·02	210
D Blandford (Whatcombe)	J.Mansel-Pleydell,Esq.	5	0 4	320 B	45·09	122
Cerne Abbas (Minterne Rectory)	Rev. H. Pix	5	2 0	566 T	53·33	208
,, ,, (Melbury)	Mr. T. C. Elliott	12	2 9	...	47·31	168
D*Wimborne Minster (Chalbury)	Rev. G. H. Billington	5	2 0	338 ⅄	34·92	182
D Sherborne School	E. Cleminshaw, Esq.	5	1 0	200 ⅄	42·30	213
D Shaftesbury	T. Ackland, Esq.	5	1 1	722 ⅄	44·82	202
D Gillingham	I. Stephens, Esq.	5	1 0	300	39·60	209
DEVON.						
Salcombe (Prawle Point)	The Meteor. Council	8	1 9	350	39·31	203
,, (The Molt)	J. Drew, Esq.	8	1 2	61 L	48·91	...
† ,, (Bolt Tail) (58)	G. Balkwill, Jun., Esq.	5	2 0	297 L	41·51	..
D†Kingsbridge (Fore St. Hill) (56)	G. Fox, Esq.	5	1 0	63 B	55·51	195
D ,, (Ringmore)	BaldwinLathamEsq CE	5	1 0	...	50·05	186
D Dartmouth (Strete)	Dr. Madden	8	1 0	200 B	47·71	177
D Plymouth(Navigation School)(52)	J.Merrifield,Esq.LL.D.	8	9 2	75 ⅄	41·21	219
D*Devonport (Rowdens Res.)	H. Francis, Esq.	5	1 0	202 ⅄	44·50	245
D†Ivybridge (49)	Dr. Liddell	10	3 0	175 B	62·51	255
Brixham (Lupton) (48)	Mr. J. Gibson	5	2 6	210 T	46·48	175
Plympton (Hemerdon) (69)	Rev. G. L. Woollcombe	5	1 0	360	65·37	...
D Totnes (45)	T. H. Edmonds, Esq.	5	1 0	94 L	53·66	235
Paignton (Hollacombe)	J. Greenfield, Esq.	5	7 0	70 ?	42·80	230
D ,, (Madeira Cottage)	P. Symons, Esq.	5	6 0	20 T	41·37	219
†Dartmoor (Lee Moor) (44)	W. L. Martin, Esq.	5	0 9	860 ⅄	74·56	...
Bere Ferrers	Rev. F. T. W. Wintle.	5	1 0	100	55 62	233
D†Torquay (Lamorna) (43)	W.Pengelly, Esq.F.R.S	5	1 0	200 ⅄	41·18	217
D ,, (Rocombe House)	H. Hearder, Esq.	5	1 0	400 T	38·26	215
D* ,, (Castle College)	C. J. Harland, Esq.	5	1 0	167 ⅄	38·48	...
D† ,, (Babbacombe) *Snowdon*	E. E. Glyde, Esq.	5	1 0	294 ⅄	41·23	214
Buckfastleigh (Bossel Park)	J. Hamlyn, Esq.	5	2 0	150	72·40	172
* Walkhampton (Lowery)	H. Francis, Esq.	8	1 0	900	76·35	...

NOTE.—The numbers in parentheses in this and the three following pages refer to a Map inserted between pages 148 and 149 of *British Rainfall*, 1872.

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
DEVON—(*con.*)						
Abbots Kerswell (Court Grange)	Mrs. Hare	5	1 0	130 B	46·02	194
D Ashburton (Holne Vicarage) (33)	Rev. J. Gill.....	5	1 0	650 B	76·97	239
D† ,, (Druid House) ...(32)	Fabyan Amery, Esq....	5	1 0	572 T	62·12	219
D ,, (Leusden Vicarage)...	Rev. F. Gilbert White	5	1 0	800	55·59	235
D Kingsteignton (Teignbridge Ho.)	F. H. Plumptre, Esq...	5	1 0	27 ⅄	42·65	191
†Teignmouth (Lower Reservoir)...	W. C. Lake, Esq. M.D.	5	1 0	138 L	45·15	225
,, (Marine Villa)	W. B. Harris, Esq. ...	5	1 0	18	39·53	188
D ,, (Woodway)	G. W. Ormerod, Esq....	5	1 0	235	40·98	217
D†Tavistock (Public Library)...(38)	Mr. R. Westington ...	8	20 0	283 T	55·83	253
,, (Kelly College).....	Rev. R. W. Taylor ...	5	0 9	328	57·94	233
*† ,, (Mount Tavy).....(37)	H. Clark, Esq.	5	1 0	316 T	59·43	...
D†Ilsington (Middlecott House)(23)	Alfred Lyon, Esq.	9	3 6	649 T	61·26	207
* Princetown (Cowsic Valley).....	H. Francis, Esq.	8	1 6	1398 ⅄	102·73	...
Ashburton (Widecombe Vic.) (24)	Rev. J. Williams	5	1 0	810	71·19	...
D ,, (Cator Court)	F. H. Firth, Esq.	5	1 4	1060 T	76·10	246
D Dawlish	Capt. Strangways, R.N.	5	1 0	120 B	42·42	209
†Milton Abbot (Endsleigh) ...(26)	Mr. W. Prout	5	1 0	180 ?	58·56	...
D†Bovey Tracey .....(22)	J. Divett, Esq.	5	0 6	94 ⅄	50·72	248
D Budleigh Salterton(E. Budleigh)	R. H. Lipscomb, Esq...	5	1 0	70 ⅄	41·96	187
Starcross (Powderham Castle) ...	J. Drew, Esq.....	5	2 6	57 L	37·48	162
Coryton (Lew Down) .....(21)	Mr. T. M. Symons	5	4 0	445	58·34	242
D Polapit Tamar [Launceston] (76)	E. Coode, Esq.	12	3 0	...	52·17	272
†Sidmouth (Sidmount)	The Meteor. Society ...	5	1 0	149 ⅄	41·00	226
†Topsham (Clyst St. George)	Rev. H. T. Ellacombe..	5	1 3	76 T	38·25	...
D†Clevelands [Lyme Regis]	E. L. Ames, Esq.	5	1 11	465 ⅄	42·34	216
D†Exeter (Devon & Exet. Inst.) (17)	Mr. E. Parfitt.....	6	13 7	155 ⅄	38·98	180
D ,, (Manston Terrace) ...(18)	Miss Dymond	5	1 0	166 ⅄	39·47	222
D Uplyme [Lyme Regis]	H. Tucker, Esq.....	5	1 0	120 B	44·79	212
Colyton	W. R. Fox, Esq., R.N.	5	1 6	100	45·68	...
D†Okehampton (Oaklands).....(19)	W. H. Holley, Esq. ...	5	1 0	521 T	59·57	229
D†Exeter (Brampford Speke)...(13)	W. H. Gamlen, Esq....	5	1 0	140 T	41·88	242
,, (,, ,,) ...(13)	,, ,, ,, ...	8	0 3	140 T	40·38	...
,, (,, ,,) ...(13)	,, ,, ,, ...	5	1 0	140 B	38·49?	...
D Holsworthy (Clawton) .....(16)	W. W. Melhuish, Esq..	5	1 1	400	52·14	236
D Honiton (Gittisham)	C. Hardy, Esq.	5	1 0	...	49·13	217
Axminster	Mr. S. Griffin.....	5	3 0	...	47·51	202
D Hele (Strath Culm)	C. R. Collins, Esq.....	8	0 6	159 ⅄	39·21	160
Hatherleigh (Broomford Manor)	Mr. W. Mortimore.....	5	1 4	..	51·67	189
D Bradninch Vicarage	Rev. W. A. Strong ...	5	1 0	316 B	45·35	240
Hatherleigh (Winsford)	Mr. A. Muirhead	5	1 5	...	64·38	...
Cullompton.....	T. Turner, Esq.	5	1 1	202 ⅄	45·47	236
Tiverton (Cove)..... ...(9)	W. N. Row, Esq.	11	1 0	450 ?	55·07	...
D ,, (Rose Bank)	H. B. Sharland, Esq....	5	1 0	280	51·65	235
,, (Ivy Place)	H. S. Gill, Esq.....	5	6 0	270	50·25	235
Churchstanton	Rev. A. D. Taylor.. ...	5	1 4	900	50·05	176
D†Torrington (Langtree Wick) (72)	E. A. Bazely, Esq.....	5	1 0	451 T	60·29	...
D† ,, Vicarage .....(61)	Rev. S. Buckland	5	1 0	323 T	55·60	215

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground.	Height above Sea Level	Depth of Rain. 1882	Days on which 01 or more fell.
			ft. in.	feet.	inches.	
DEVON—(*con.*)						
Torrington (Stevenstone)	R. H. Lipscomb, Esq...	5	1 0	400	56·25	221
,, (Little Silver)	,, ,, ,, ...	5	1 0	400 T	57·57	262
D Bampton (Huntsham)	Col. Troyte	8	1 0	600 B	59·38	255
South Molton (Rose Ash) ...(60)	Col. Davy	8	1 0	650 T	52·71	224
D Bideford(Heale House Littleham)	R. Sanders, Esq.	8	1 0	280 B	52·34	221
D South Molton (East Street) (59)	N.C.Hatherly, Esq.M.D	5	1 0	430 B	57·42	230
,, ,, (Castle Hill) ...(4)	Mr. R. Nicholas	12	3 6	600	60·78	174
*†Bideford (Horwood) ...(71)	Rev. J. Dene	5	1 0	288 T	44·23	225
*† ,, (Northam) ...(5)	Rev. M. D. Churchward	5	1 0	173 ⅄	48·26	236
D†Barnstaple ...(3)	Mr. Knill	8	1 0	31 ⅄	53·71	221
D ,, (Arlington Court) ...	Lady Chichester	8	1 1	613 B	76·17	253
D†Ilfracombe Hotel ...(1)	Mr. W. Tattam	12	9 0	34	42·08	218
†Lynton (Lee Abbey)	C. F. Bailey, Esq.	5	0 6	320	47·73	...
D†Lynmouth (Glenthorne)	Mrs. Halliday	5	0 9	93	58·85	222
CORNWALL.						
D Helston	J. Gill, Esq.	8	1 0	185	49·78	258
†Penzance (South Parade)	W. H. Richards, Esq...	12	3 0	94 T	59·12	...
D ,, (Regent Terrace)	Com. Giles, R.N.	6	2 0	26	55·20	256
D ,, (St. Clare)	Rev.Preben. Hedgeland	5	1 0	211 T	56·78	258
D ,, (Poltair)	Col. Trelawny	5	1 0	243 B	60·01	251
Marazion	T. W. Field, Esq.	5	2 0	30 ?	51·61	250
Falmouth	The Meteor. Council ..	...	...	...	60·47	239
D ,,	W. L. Fox, Esq.	8	1 9	167	58·94	243
D Camborne (Crowan)	J. T. Rodda, Esq.	5	0 5	522	60·17	164
St. Just	Mr. R. B. Searle	...	...	...	59·76	...
D Falmouth (Carclew)	Mr. J. Simmons	5	0 9	...	56·80	229
D Redruth (Trewirgie)	A. H. Jenkin, Esq. ...	5	1 0	400 T	57·53	252
D†Truro (Royal Institution)	Mr. Newcombe	5	40 0	56 ⅄	48·10	220
D ,, (Porthgwidden)	Rev. Canon Phillpotts.	5	1 0	50	49·33	218
D Probus (Lamellyn)	H. Tresawna, Esq.	5	0 6	...	54·81	210
St. Agnes	Mr. Opie	5	1 3	278 B	47·30	174
D Rame Rectory [Plymouth]	Rev. W. C. Evans	5	1 0	300 T	42·06	226
St Austell (St. Mewan)	Rev. G. L. Woolcombe.	5	1 0	275 T	57·43	...
,, (Polcarne)	J. Coode, Esq.	5	1 0	244 ⅄	58·07	202
D†* ,, (Trevarna)	W. Coode, Esq.	5	0 6	300 ⅄	61·16	246
Par Station (Penellick)	W. E. Geach, Esq. ...	5	0 9	240 B	45·50	...
D Maker Vicarage [Devonport] ..	Rev. P. H. Newnham...	5	1 0	290 T	43·13	237
Empacombe [Devonport]	S. Harvey, Esq.	5	1 3	20	46·16	221
D St. Johns [Devonport]	Rev. J. H. Kirwan	5	1 0	20	47·04	223
D†Newquay	Mr. W. H. Tregidgo...	5	1 9	90 B	53·68	222
D†Liskeard (Dean Terrace) ...(47)	S. W. Jenkin, Esq., C.E.	5	1 1	375 ⅄	60·54	242
D†Saltash (Pentillie Castle) ...(46)	Mr. C. Edwards	5	1 3	150 B	62·47	203
†Bodmin (Lanhydrock)	Rev. Prebendary Every	...	2 1	390	57·67	240
,, (Castle Street) ...*weekly*	Capt. Liddell, R.N. ...	5	0 1	315 T	63·91	243
† ,, (,, ,,)	,, ,, ,, ...	5	1 0	316 T	62·03	243
D† ,, (,, ,,)	,, ,, ,, ...	8	2 6	318 T	60·18	243
D† ,, (Fore Street)	Mr. A. Hambly	8	2 6	336 T	63·34	246

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
CORNWALL—(*con.*)						
Liskeard (St. Cleer) .....(68)	S. W. Jenkin, Esq., C.E.	5	1 1	620 ⅄	60·20	...
D†Callington (Hingston Down) (39)	Capt. Richards	5	3 0	850 T	60·30	262
D†Launceston (Altarnun) .....(28)	Rev. J. Power	5	1 0	570 B	75·86	247
Camelford	Rev. G. B. Gibbons ...	5	1 6	600 T	73·30	...
†Launceston (Hexworthy) ...(27)	H. M. Harvey, Esq. ...	5	2 7	410 T	54·09	239
D ,, (South Petherwin)...	Rev. H. T. May.....	5	0 4	470 B	67·70	249
North Tamerton [Holsworthy]..	Major Holt	5	0 10	500	54·38	240
D Stratton (Week St. Mary)	Rev. G. H. Hopkins ...	8	1 3	510 T	50·43	211
D Bude	J. Arthur, Esq.	5	1 0	16 B	46·57	175
SOMERSET.						
Crewkerne (Seaborough)	J. T. Stevens, Esq. ...	5	1 3	220 ?	44·37	185
Chard (Cricket St. Thomas).....	RtHn. Viscount Bridport	5	1 0	400 B	48·34	193
D Crewkerne (Bincombe House) ...	F. J. Sparks, Esq.	5	1 2	250 T	46·51	175
D Yeovil (West Coker)	Mr. A. Spurr	5	1 0	236 ⅄	42·13	197
,, ...	J. Curtis, Esq.	5	1 0	...	40·48	180
D Ilminster (White Lackington)...	Rev. Prebendry Gowring	5	1 0	136 ⅄	41·95	236
D South Petherton.....	W. Blake, Esq.	8	0 8	150 ?	36·80	208
Wellington (Sunnyside)	W. Elworthy, Esq. ...	5	1 0	...	42·13	150
Ilchester (Chilton Cantelo)	Rev. G. J. Ford.....	4	...	...	31·36	180
D*Taunton (Fullands School)	Rev. W. Reed	5	1 4	...	34·36	192
D Dulverton (Skilgate)	Rev. J. Bere	5	0 7	750	62·31	245
D Milverton	J. H. Bere, Esq.....	5	1 0	335 ?	47·78	235
D ,, (Halse Rectory)	The late Rev. W. Thomas	5	1 0	245	41·81	225
D ,, (Fitzhead Court)	E. H. Knollys, Esq. ...	5	1 0	200 ?	46·45	220
Wiveliscombe (Withycombe Ho.)	R. P. Mogridge, Esq...	5	1 0	800 B	54·24	...
Cothelston House	C. E. J. Esdaile, Esq...	5	1 0	500	44·54	210
D Somerton (Butleigh Court)	R. Neville, Esq.....	8	1 2	80	37·81	193
D Glastonbury (Street)	W. S. Clark, Esq.	8	1 0	70	37·85	221
,, (,,)	J. Clark, Esq.....	8	1 3	60	35·12	164
D Exford Rectory	Rev. J. G. Howes	5	1 0	905 B	71·18	256
Bridgwater (Ashford)	G. B. Laffan, Esq.....	...	...	...	40·37	186
Watchet (Williton)	J. S. Ingram, Esq.....	3	5 6	71	49·45	205
D Wells	Mr. R. S. Manning ...	...	35 0 ?	...	48·36	205
D Frome (Mells Rectory)	Rev. G. Horner	5	1 0	344 ⅄	50·39	247
,, (Rock House, Mells).....	W. A. Fussell, Esq. .	...	...	...	48·92	...
Radstock (Downside).....	The Meteor. Society ...	8	0 6	592	53·07	210
Chewton Mendip (The Priory)...	Mr. J. Dart	5	1 5	550 T	57·42	193
,, ,, (Ston Easton) .	H. E. Hippisley, Esq..	5	3 0	480	50·81	...
E. Harptree (Sherborne Reservoir)	Bristol Water Works...	5	1 0	338 T	50·96	212
D ,, (Harptree Court) ...	W. W. Kettlewell, Esq.	5	0 5	345 T	54·70	202
Axbridge (Winscombe).....	Rev. R. F. Follett	8	1 0	150 B	48·63	188
Weston-super-Mare	The Meteor. Soc.	...	...	...	40·14	212
,, ,, ,, (Worle Vic.)	Rev. W. F. Rose	5	1 0	16	46·53	...
Chew Magna	Bristol Water Works...	5	1 0	160 T	50·19	203
D†Bath (Royal Literary Institute).	C. P. Russell, Esq.....	6	8 0	75 ⅄	42·29	182
D ,, (Queen's Parade)	H. Stokes, Esq.	5	1 0	100	42·92	237

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1882 inches.	Days on which ·01 or more fell.
SOMERSET—(*con.*)							
D Batheaston Reservoir	A. Mitchell, Esq.	6	2	0	226 T	44·26	185
Yatton (Chelvey)	Bristol Water Works...	5	1	0	...	41·04	...
Barrow Gurney Reservoir	,, ,, ,, ...	5	1	0	320 T	52·76	211
D Wraxall (Naish House)	Mr. Ireland	8	1	2	...	46·53	173

DIVISION VI.—WEST MIDLAND COUNTIES.

GLOUCESTER.							
Bristol (Small Street)	Bristol Water Works...	12	37	6	52	43·12	208
D† Clifton (South Parade)	Dr. G. F. Burder	8	1	0	192 ⅄	48·28	204
D Bristol (Over Court)	R.C.C. Lippincott, Esq..	5	1	0	148 T	47·11	217
,, ,, ,,	,, ,, ,, ...	8	0	8	138	46·56	215
D Chipping Sodbury (StanshawsCt)	R. N. Hooper, Esq. ...	5	1	3	280 T	45·19	198
D Tidenham [Chepstow]	Rev. P. Burd	5	1	0	105 T	41·89	184
D Fairford (Kempsford)	R. A. Iles, Esq.	5	0	8	...	36·74	180
D Berkeley (Salter Street)	J. H. Cooke, Esq.	5	8	0	60	38·32	191
D Nailsworth (Spring Hill)	E. P. Westley, Esq. ...	8	2	0	160?	48·89	216
D Berkeley (Sharpness New Docks)	W.B.Clegram, Esq., C.E	5	3	6	50	45·69	196
D Lechlade	T. Arkell, Esq.	5	0	10	...	37·44	200
Fairford (Park Farm)	A. Iles, jun., Esq.	5	0	9	295 T	38·12	...
D Cirencester (The Firs)	F. Bravender, Esq. ...	5	0	8	352 ⅄	44·28	197
D ,, (Claremont Place)	R. Gorton, Esq.	8	1	0	355 T	45·88	226
,, (,, ,,)*weekly*	,, ,, ,,	8	2	0	356 T	43·97	...
,, (,, ,,) ...	,, ,, ,,	8	0	6	356 T	45·59	226
D ,, (Royal Agricultural Coll.)	H. H. Robinson, Esq....	5	1	0	434	43·03	196
D ,, (Further Barton)	Miss E. Brown	5	0	8	425?	38·34	181
D Stroud (Brimscombe Port)	J.H.Taunton, Esq., C.E.	8	10	0	200 ⅄	42·17	172
,, (,, Vic.)	Rev. J. Wilkinson	5	4	3	650	48·29	...
D ,, (Upfield)	Miss Stanton	5	1	0	226 ⅄	42·18	219
D Fairford (Hatherop Rectory) ...	Rev. R. P. Davies	8	1	3	412 ⅄	40·25	204
D Frampton-on-Severn (Saul Lodge)	W.B.Clegram, Esq., C.E	5	3	6	42 ⅄	40·40	207
D Coleford (The Coombs)	I. Trotter, Esq.	5	1	0	600	54·16	159
D Newnham-on-Severn	D. J. Wintle, Esq. ...	5	3	0	56 ⅄	45·43	179
D Westbury-on-Severn Vicarage...	Mrs. C. J. Jones	5	0	8	62 ⅄	44·00	224
D Great Barrington [Burford]	J. P. Wakefield, Esq...	8	1	0	416 T	52·61	191
Northleach (Yanworth)	T. Arkell, Esq.	5	1	0	...	42·42	...
,, (Sherborne Park) ...	Hon. R. Henley Eden..	5	1	0	405	44·05	132
D ,, (Hampnett Rectory).	Rev. W. Wiggin	5	1	0	600 T	40·63	209
Gloucester (Quedgeley House)...	W. G. Robinson, Esq..	5	1	0	50?	38·52	...
D ,, (Witcombe Res.)	R. Read, Esq., C.E. ...	8	3	0	297 ⅄	39·60	164
D ,, (Llanthony Lock) ...	H.J. Marten, Esq., C.E.	5	1	2	39 ⅄	35·56	187
,, (Barnwood)	Dr. A. J. Wood	8	1	8	60?	37·62	197
D Mitcheldean (Edge Hill House)..	W. H. M. Phillips, Esq.	5	1	6	750 T	47·46	203
D Gloucester (Maisemore Lock) ...	H.J. Marten, Esq., C.E.	5	1	1	40 ⅄	36·25	237
D Cheltenham (Battledown)	Sir Brook Kay, Bt. ...	5	0	6	392 ⅄	38·27	199
,, (Northfield)	W. McLandsboro', Esq.	8	2	0	520	39·91	177
,, (Hewletts Res.) ...	,, ,, ,,	8	0	9	400	39·31	177

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height above Ground.	Rain Gauge. Height above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
GLOUCESTER—(*con.*)						
D Cheltenham (Montpellier Lodge)	Rev. H. Kynaston.....	5	1 0	205	36·90	...
D ,, (Southam Villa) ...	R. Tyrer, Esq.	5	1 0	184 ⊼	37·92	214
D Moreton-in-Marsh(Longborough)	W. Arkell, Esq.....	5	0 9	...	44·80	214
D Tewkesbury (Upper Lode)	H.J. Marten, Esq., C.E.	5	1 0	41 ⊼	35·97	197
HEREFORD.						
D† Ross (The Graig)	H. Southall, Esq.	5	1 0	213 ⊼	38·40	221
Longtown Vic. [Abergavenny]...	Rev. C. L. Eagles	5	1 0	...	55·81	198
Bryngwyn	J. Rankin, Esq., M.P..	5	0 10	420 B	39·00	199
D Much Marcle (Caerswall)	T. Charles, Esq.....	5	2 0	423 B	38·41	198
D Hereford (Fownhope Vicarage)...	Rev. T. West.....	5	1 0	192 B	33·26	166
D Ledbury (West Bank)	T. E. Wheatley, Esq...	5	1 6	350	37·93	168
D ,, (Orchardleigh)	M. A. Wood, Esq.....	5	1 2	160	34·61	...
,, (Putley Court)	J. Riley, Esq.....	5	1 0	280	37·69	199
D† Hereford (Richmond Place)	F. Anderson, Esq.....	8	4 9	188 ⊼	34·80	196
,, (Hagley Park)	A. Hutchinson, Esq....	5	0 6	300 B	32·73	...
D Ledbury (Colwall).....	Mrs. Devas.....	5	1 0	640 ?	38·81	198
D ,, (Canon Frome Vic.) ...	Rev. M. Hopton.....	8	1 3	163	36·56	187
D Hereford (Burghill)	T.A.Chapman,Esq.M.D	5	1 0	275	32·47	191
D ,, (,, Portway).....	BaldwinLathamEsq CE	5	1 0	...	33·65	201
D ,, (Thinghill, Withington)	H. Higgins, Esq.	5	1 0	200 ?	32·92	203
D Staunton-on-Wye	Rev. H. W. Phillott ...	8	1 1	255 B	35·41	215
Hope-u-Dinmore (Hampton C.).	J. H. Arkwright, Esq..	8	1 3	220 B	34·39	160
D Kington (Lynhales)	S. Robinson, Esq.	8	1 0	...	46·37	214
D Pembridge (Marston).....	H. Langston, Esq.....	5	1 5	345	37·47	215
D Leominster (Farm)	H. J. Southall, Esq. ...	5	1 2	250	36·33	194
D Stoke Bliss	Rev. G. E. Alexander..	5	1 0	400 B	40·33	211
SHROPSHIRE.						
D Ludlow (Bromfield Vicarage) ...	Rev. W. Selwyn	5	1 0	300 T	41·67	204
Craven Arms (Stokesay Vic.) ...	Rev. J. D. La Touche..	5	1 0	371 ⊼	41·28	202
Bishop's Castle (Castle Street)...	E. Griffiths, Esq.	5	4 0	750 T	41·39	205
D ,, ,, (More Rectory)...	Rev. A. S. Male.....	5	1 0	640 ⊼	41·50	237
D Much Wenlock (Larden Hall) ...	Miss F.Rouse Boughton	8	1 3	658 ⊼	39·42	232
Church Stretton (Cardington) ...	Rev. W. Elliot	5	1 0	700 ⊼	37·75	213
,, ,, (Preen Manor)...	A. Sparrow, Esq.	5	1 0	700 T	37·11	217
^ ,, ,, (Woolstaston)...	Rev. E. D. Carr.	5	1 0	807 ⊼	41·84	240
D Middleton in Chirbury	Rev. W. Brewster.....	5	1 2	702 ⊼	35·71	234
D Broseley (Benthall Hall)	G. Maw, Esq.....	...	1 0	600	36·57	227
Coalbrookdale (Horsehay).....	G. Rooum, Esq.....	5	3 0	...	31·60	...
Wellington (Old Hall School) ...	Dr. J. E. Cranage	5	1 6	373 T	35·83	163
Shrewsbury.....*old gauge*	Messrs. Marshall & Co.	10	5 6	240	29·22	192
,, ...*new gauge*	,, ...	5	2 6	287 B	29·51	192
D ,, (Onslow Hall)	Mr. J. Lambert	8	0 5	...	32·94	...
,, (,, ,,)	,, ,, ...	8	0 3	...	33·40	...
D ,, (Leaton Vicarage) ...	Rev. E. V. Pigott	5	1 0	267 T	33·10	229
D Wem (Sansaw Hall)	F. G. Tippinge, Esq....	5	1 0	314 ⊼	33·16	223

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter.	Height Above Ground. ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1882 inches.	Days on which 01 or more fell.
	SHROPSHIRE—(*con.*)							
	Oswestry (Hengoed)	Rev. A. R. Lloyd	5	6	0	470 ⅄	42·19	...
	Market Drayton (Buntingsdale)	Mrs. Tayleur	5	1	0	276 ⅄	37·45	202
	STAFFORD.							
	Kinver Gram. Schl. [Stourbridge]	E. B. Marten, Esq., C.E.	8	0	6	180 L	37·59	215
	Dennis [Stourbridge]	Mr. C. Webb	8	6	6	270 B	37·95	207
	Walsall	E. B. Marten, Esq., C.E.	8	4	0	463 ⅄	48·05	231
D	Wolverhampton (Town Hall)	G. E. Thoms, Esq., C.E.	5	15	6	481	40·29	221
	,, Park	Mr. W. Thomas	5	1	0	430 ⅄	40·91	254
	Patshull Gardens	Mr. Phillips	8	1	5	400	36·82	224
	Wolverhampton (Thorganby Vil.)	G. C. Broom, Esq., C.E.	8	3	4	459 ⅄	40·85	...
D	,, (Wrottesley)	Mr. E. Simpson	8	1	0	500	40·03	196
D	Tamworth (Lichfield Street)	W. Arnold, Esq.	5	1	0	160 ?	40·68	197
	Lichfield Museum	Mr. J. P. Roberts	5	5	8	220 ⅄	39·06	211
	,, (St. Michael's Rect.)	Rev. J. J. Serjeantson	5	0	6	320 ⅄	41·03	...
D	Weston-under-Lyziard [Shifnal]	Hon. Rev. J. Bridgeman	3	0	10	..	42·14	237
D	,, Park [Shifnal]	Mr. J. Hope	5	1	6	600	41·82	238
D	Penkridge (Rodbaston)	H. Ward, Esq.	5	1	0	260 ?	40·12	203
D	Church Eaton (Shushions Manor)	T. James, Esq.	5	1	0	325 L	39·62	241
D	Alrewas (The Cottage)	E. Sellick, Esq.	5	1	6	...	35·82	201
D	Burton-on-Trent (Grammar Schl)	C. U. Tripp, Esq.	5	1	0	160 T	37·97	228
D	,, ,, (Shobnall)	R. W. Abbotts, Esq.	5	6	0	150 T	36·50	195
D	Uttoxeter (Leigh)	J. B. Piercy, Esq.	5	1	0	498 ⅄	47·09	218
	Stoke (Barlaston)	The late W. Scott, Esq.	5	1	0	520 T	46·45	187
D†	Cheadle (The Heath House)	J. C. Phillips, Esq.	5	1	0	647 ⅄	45·84	222
D†	,, (Tean Vicarage)	Rev. G. T. Ryves	5	1	0	470 T	45·98	224
D	,, (,, ,,) *new g.*	,, ,, ,,	5	1	0	470 T	46·82	225
D	Longton (The Meir)	J. B. Piercy, Esq.	5	1	0	618 ⅄	47·34	224
	Cheadle (Oakamoor)	Mr. J. G. Williams	5	1	0	346 ⅄	52·60	224
	Stoke (Stanley Reservoir)	W. H. Stubbs, Esq., C.E.	5	3	1	550 T	39·55	145
	Etruria	,, ,, ,,	5	4	2	440	41·41	220
	Burslem	J. E. Worth, Esq., CE.	8	0	8	555 ⅄	43·83	218
D	Leek (Wall Grange)	J. B. Piercy, Esq.	8	1	0	458 ⅄	52·12	224
D	,, (,, ,,)	,, ,, ,,	5	1	0	458 ⅄	51·97	223
	Alstonfield Vicarage	Rev. W. H. Purchas	5	1	0	910 T	57·61	218
	Knypersley [Congleton]	W. H. Stubbs, Esq., C.E.	5	14	0	500 T	61·39?	210
D	Leek	S. Eyre, Esq.	3	6	0	538 T	54·11	217
	WORCESTER.							
	Blockley	R. B. Belcher, Esq.	5	1	0	350	39·18	...
	Northwick Park	Rt Hon Lord Northwick	8	1	3	292 ⅄	38·72	...
D	Little Malvern (The Farm)	E. J. Moody, Esq.	8	1	0	500	37·96	194
D	Evesham (Lansdowne)	R. Burlingham, Esq.	5	5	6	124 B	32·68	151
D	,,	T. J. Slatter, Esq.	5	1	3	103 ?	35 34	215
	West Malvern	A. H. Hartland, Esq.	8	1	6	850 B	39·78	203
D	Great Malvern (Hornyold Ter.)	W. Sandoe, Esq.	5	0	7	550 L	40·87	195

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	WORCESTER—(*con.*)						
	Great Malvern	J. E. Palmer, Esq.	5	1 0	357 ⅄	37·36	...
	,, ,, (Madresfield)	Rev. G. S. Munn	5	1 7	120 ?	36·68	168
D	Worcester (Diglis Lock)	H. J. Marten, Esq., C.E.	5	1 0	49 ⅄	33·35	194
D	,, (St. John's)	G. B. Wetherall, Esq.	5	1 6	...	32·18	194
D	,, (Bevere Lock)	H. J. Marten, Esq., C.E.	5	1 1	52 ⅄	32·93	206
	,, (Hawford Lodge)	Mr. G. Read	5	1 1	...	35·13	185
D	Droitwich (Holt Lock)	H. J. Martin, Esq., C.E.	5	1 1	55 ⅄	33·25	167
D	Tenbury (Orleton)	T. H. Davis, Esq.	5	0 9	200 ?	40·71	226
	Redditch	H. Page, Esq., M.D.	7	4 0	524 T	39·00	242
D	Bromsgrove (Stoke Reformatory)	Mr. J. Salter	5	1 3	225 L	35·05	167
D	,, (Tardebigge Res.)	W. B. Clegram, Esq. C.E.	5	3 0	433 T	41·07	223
D	Stourport (Lincombe Lock)	H. J. Marten, Esq., C.E.	5	1 0	62 ⅄	35·82	253
	,, (Hartlebury)	J. Watson, Esq.	5	1 6	320	33·97	...
	,, (Areley Court)	C. Harrison, Esq.	5	1 0	145 T	33·86	208
D	Bromsgrove (Upper Bittal Res.)	W. B. Clegram, Esq. C.E.	5	3 0	518 T	42·08	214
D	Bewdley (Tanner's Hill)	Mr. W. Wrather	8	2 0	...	36·12	202
	Stourbridge (Pedmore)	E. B. Marten, Esq., C.E.	8	0 11	350 ⅄	39·82	215
	,, (Longlands)	,, ,, ,,	8	1 0	260 ⅄	39·07	211
	Moseley [Birmingham]	T. L. Plant, Esq.	...	...	...	43·06	...
	WARWICK.						
D	Shipston (Compton Wynyates)	J. Sargent, Esq.	5	2 9	...	36·42	190
	Radway (Ivy Lodge)	Rev. G. Miller	5	1 1	530 T	38·16	194
	Kineton (Fenny Compton)	E. Knott, Esq.	5	4 0	430	36·66	...
	Stratford-on-Avon (Avonside)	C. Lucy, Esq.	8	0 8	123 T	38·26	...
D	Warwick (Barford Rect.)	Rev. C. Mills	8	0 10	200 ?	35·82	194
D	Southam (Stockton)	Rev. W. Tuckwell	5	1 0	289 B	33·38	196
D	Warwick (Priory Gardens)	Mr. R. Greenfield	5	3 9	240	35·00	159
	Leamington (Upper Parade)	J. Barnitt, Esq.	5	0 8	195 ⅄	34·19	187
D	Henley-in-Arden (Barrells Park)	T. H. G. Newton, Esq.	5	1 0	300 ⅄	42·14	215
D	Leamington (Blackdown Hill)	A. S. Field, Esq.	5	0 9	250 T	35·58	188
D	Kenilworth (Lynton Villa)	F. Slade, Esq., C.E.	8	1 0	290 ⅄	37·44	199
	,, (Thickthorns)	Capt. Pennington	...	...	...	36·37	...
	Rugby School	W. G. Michell, Esq.	5	1 3	383 T	36·01	197
D	Coventry (Ryton on Dunsmore)	C. Twamley, Esq.	5	1 4	260 T	36·02	201
D	,, (Priory Row)	J. Gulson, Esq.	8	1 2	279 ⅄	37·10	207
D	,, (Middlesboro' Terrace)	Miss Merry	5	1 0	345 ⅄	36·32	209
D	,, (Walsgrave-on-Sowe)	J. S. Whittem, Esq.	8	1 0	296 T	36·77	185
D	,, (Coundon)	Colonel Caldicott	5	1 0	350 T	37·12	210
D	Willey Rectory [Lutterworth]	B. P. M. Payler, Esq.	8	1 0	350 T	36·13	209
D	Birmingham (Botanic Gardens)	Mr. Latham	5	5 2	505 T	37·23	212
D	,, (Bloomsbury Street)	D. Smith, Esq.	8	0 8	340 T	42·71	193
D†	Oscott (St. Mary's College)	Rev. J. MacElmail	5	0 6	461 T	36·51	188
D	Nuneaton (Caldecote House)	Rev. Dr. Parker	5	1 0	340	41·94	238
D	Atherstone	Baldwin Latham Esq C.E.	5	1 0	286 ⅄	38·23	199

DIVISION VII.—NORTH MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
LEICESTER.						
Market Harboro' (The Hutch)	R. Symington, Esq.	8	4 0	267 T	31·28	...
,, ,, (Foxton Locks)	J. F. Bentley, Esq.	12	17 2	...	28·32	145
D Ashby Magna	Rev. Canon Willes	5	1 6	438 T	33·09	188
†Arnesby Vicarage	Rev. W. P. Orton	8	1 2	400 ?	33·04	145
†Fleckney	J. B. Putt, Esq.	5	1 0	411 T	36·39	...
D†Kibworth Beauchamp	T. Macaulay, Esq.	5	2 6	355 T	34·94	206
D†Leicester (Town Museum)	J. C. Smith, Esq.	5	1 0	238 T	36·25	226
,, (Belmont Villas)	H. Billson, Esq.	8	1 3	240	35·83	...
D†Thornton Reservoir	F. Griffith, Esq., C.E.	10	2 8	420 ?	35·02	160
Barkby	Rev. E. N. Pochin	5	0 1	212	34·17	181
D Thurcaston (Cropston)	F. Griffith, Esq., C.E.	8	1 0	...	37·23	199
D Syston (Grove House)	J. Hames, Esq.	5	5 0	190 ⅄	32·05	219
D Melton Mowbray (Dalby Hall)	Mr. G. Jones	8	2 6	480 B	33·15	197
D ,, ,, (Thorpe Arnold)	Rev. J. S. Swift	8	2 3	320 ?	31·72	187
Loughborough (Cedar Cottage)	J. Giles, Esq.	5	0 9	400 ?	38·67	...
D ,, (Victoria Street)	W. Berridge, Esq.	5	0 10	169 B	34·26	194
D Melton Mowbray (Coston Rect.)	Rev. A. M. Rendell	5	1 0	300 ?	34·46	209
D Waltham-le-Wolds	Mr. E. Ball	5	1 6	500 T	37·54	204
D Harston [Grantham]	F. Beasley, Esq.	...	1 3	...	36·45	182
D†Belvoir Castle	W. Ingram, Esq.	8	1 0	237 T	35·73	226
RUTLAND.						
D Uppingham (West Deyne)	Rev. G. H. Mullins	8	1 9	485 ⅄	31·79	195
,, (Ayston)	Mr. Hull	5	1 0	...	36·07	...
D Ketton Hall [Stamford]	F. Coventry, Esq.	5	1 0	130 B	32·76	197
Burley-on-the-Hill	Mr. W. Temple	8	1 0	...	35·08	175
Ryhall	Rev. C. Potchett	5	1 0	...	31·77	167
D Oakham (Greetham)	Rev. C. A. Holmes	5	0 8	...	34·92	170
D Market Overton	Miss H. E. G. Wingfield	8	0 11	...	36·36	235
LINCOLN.						
Stamford (Barn Hill Ho.)	Dr. Newman	5	1 0	116 T	30·55	...
D ,, (Northfields)	Mr. W. Hayes	5	1 0	160 ⅄	32·19	176
D*Bourne (Wytham-on-the-Hill)	A. C. Johnson, Esq.	5	1 0	167 ?	29·26	...
Long Sutton (Tydd Gote)	Mr. J. Tilson	5	4 0	...	30·63	175
Spalding (Pode Hole)	Mr. A. Harrison	12	0 3	20 ⅄	30·50	...
Grantham (Saltersford)	H. Preston, Esq.	5	0 7	188 ⅄	34·67	...
,, (Heydour Vicarage)	Rev. G. F. Deedes	5	1 2	...	32·65	110
D Boston (High Street)	W. H. Wheeler, Esq. C.E.	5	6 6	24 ⅄	30·82	166
D ,, (Grand Sluice)	J. E. Williams, Esq. C.E.	8	6 0	22	30·18	201
D ,, (Churchyard)	Mr. E. C. Hackford	5	3 0	22	30·28	173
,, (Church Tower)	,, ,, ,,	5	260 0	282	13·83	...
D Stubton [Newark]	G. Nevile, Esq.	5	4 6	...	35·79	200
Sleaford (Bloxholm)	Mr. D. Lumsden	5	1 0	20	33·71	152
D Navenby	Rev. J. Hays	8	0 6	...	33·08	194
D Spilsby	Dr. West Walker	5	1 0	...	29·54	195

DIVISION VII.—NORTH MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which 01 or more fell.
				ft. in.	feet.	inches.	
	LINCOLN—(*con.*)						
	Horncastle (Miningsby)	W.H.Wheeler,Esq.C.E	5	0 6	131 ⅄	32·76	136
D	Lincoln (Longhills)	A.S.LeslieMelville,Esq.	5	0 6	110 ?	35·28	187
	Spilsby (Partney)	Rev. T. Owston	5	1 0	73	32·71	198
D	Horncastle (Bucknall)	W. Carter, Esq.	5	1 6	50	32·98	163
	,, (Queen Street)	H. George, Esq., M.D..	5	1 0	100	32·49	...
D†	Lincoln (Boultham)	Mr. F. Terrill	5	1 0	18 ⅄	37·45	...
†	,, (St. Botolphs)	H. Teague, Esq.	5	1 3	25 ⅄	32·75	...
D	,, (Doddington)	Rev. R. E. Cole	5	1 2	...	33·44	178
	,,	M. S. & L. R. Co.‡	9	3 6	26	32·96	190
D	,, (Brayford Wharf)	Mr. J. W. Horton	5	5 8	28 T	33·27	211
	,, (Tentercroft Street)	J. Norton, Esq.	8	...	...	35·48	...
	,, (The Quarry)	R. Swan, Esq.	8	0 8	130	32·18	151
	,, (Skellingthorpe Hall)	R. C. B. Coupland, Esq.	5	1 1	...	34·08	183
D	Horncastle (Hemingby)	Rev. E. S. Bengough..	5	1 0	101 ?	36·93	206
D	Alford (The Sycamores)	J. E. Mason, Esq.	8	1 3	20 ?	32·43	208
	Gate Burton	M. S. & L. R. Co.	9	3 6	96	30·99	164
D†	Louth	T. W. Wallis, Esq.	5	6 0	111 ⅄	34·17	204
†	,, (Westgate)	Dr. F. Fawssett	5	0 9	110 ⅄	34·25	204
	Market Rasen	M. S. & L. R. Co.	9	...	100	36·58	158
	Gainsborough	,, ,, ,,	9	...	76	29·20	155
	Stockwith	,, ,, ,,	9	3 6	21	34·37	167
	Caistor	Rev. R. Thomas	5	0 9	...	36·54	153
	Brigg	M. S. & L. R. Co.	9	3 6	16	30·19	160
D	,,	A. Atkinson, Esq.	8	1 2	10	36·91	218
D	Grimsby (Aylesby)	S. McAulay, Esq.	5	2 0	...	35·33	196
	,, (Riby)	T. Hopkins, Esq.	5	3 0	...	36·40	...
	,,	M. S. & L. R. Co.	9	15 0	42	29·12	173
	Barnetby	,, ,, ,,	9	3 6	51	36·91	154
D	N Level Engine [Thorne Donc'st'r]	Mr. J. Turner	5	2 3	...	31·67	198
	Crowle (Keadby)	M. S. & L. R. Co.	9	...	10	28·61	159
	Appleby	Rev. J. E. Cross	5	0 9	60 L	35·08	...
D	Ulceby (Killingholme)	Rev. J. Byron	5	1 4	60 ⅄	34·72	224
	Ferriby Sluice	Rev. J. E. Cross	5	0 9	10	34·37	...
	New Holland	M. S. & L. R. Co.	9	3 6	18	29·92	200
	NOTTS.						
	Normanton on Soar [Loughboro']	T. W. Rowland, Esq.	5	0 0	118	33·30	..
D	Kingston Hall [Loughborough]	Mr. J. W. Bayne	5	2 0	...	33·16	184
D	Thrumpton Hall	Mr. Geddes	...	...	...	32·85	193
	Cropwell Bishop (Cropwell Grove)	H. Smith, jun., Esq.	5	1 1	...	32·54	126
	,, ,, (Cropwell Butler)	J. Parr, Esq.	...	...	...	32·20	...
D	Nottingham (Beeston Fields)	G. Fellows, Esq.	5	1 2	215 B	37·80	210
D	,, (The Park)	M.O.Tarbotton,Esq,C.E	8	1 0	183 ⅄	34·38	193
	,, (,,)	,, ,, ,,	8	39 0	222 ⅄	31·82	190
	,, (Park Hill)	H. F. Johnson, Esq.	...	...	286	36·43	204

‡ Kept for the Canals Department of the Manchester, Sheffield, and Lincolnshire Railway Company.
Returns supplied by R. D. Heathcott, Esq.

DIVISION VII.—NORTH MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	NOTTS—(*con.*)						
	Nottingham (Woodborough Road)	A. S. Rogers, Esq.....	5	1 0	257 T	37·25	184
D	,, (Cavendish Crescent N)	J. D. Walker, Esq	5	1 2	200 ?	33·61	202
D	,, (Stoke Bardolph Sew Frm)	Mr. J. Avis.....	8	6 7	...	32·77	173
D	,, (Strelley Hall)	T. L. K. Edge, Esq. ...	8	1 0	396 ⅄	37·43	218
	,, (,,)*monthly*	,, ,, ,, ...	5	1 0	396 ⅄	37·61	...
D	,, (Mapperley Hill) ...	E. Powell, Esq.	8	1 0	400	35·04	181
	,, (Gedling)	Hon&RvO. W. Forrester	8	3 0	161 T	34·96	208
D	East Bridgford	W. W. Morris, Esq....	4	1 6	...	37·74	193
	Eastwood Colliery	Mr. W. Weston..... ..	5	38 0	280	32·62	190
D	,, ...	,, ,, ,, ...	5	1 0	245 T	38·38	198
	Greasley (Moorgreen)	S. Taylor, Esq.....	5	4 0	387 ⅄	39·22	212
D	Hucknall Torkard (Forge Mills)	J. D. Walker, Esq.....	5	1 0	...	36·87	224
	Annesley Park	Mr. A. Young	8	2 0	550	34·86	...
	Southwell (Oxton).....	H. Sherbrooke, Esq. ...	2	0 9	...	34·98	...
D	Ollerton (Thoresby Gardens) ...	Mr. A. Henderson	8	4 0	175	35·05	171
D	Tuxford (Grammar School).....	J. N. Dufty Esq.	5	1 0	220 T	34·18	178
	Worksop.....	M. S. & L. R. Co.	9	3 6	127	32·31	169
D	,, (Osberton)	Mr. S. A. Woods	5	3 7	...	37·94	209
	Retford	M. S. & L. R. Co.	9	3 6	52	30·08	178
D	Worksop (Hodsock Priory)	H. Mellish, Esq.	8	1 0	56 ⅄	31·95	210
D	The Gardens [Bawtry Hall] ...	L. T. Baines, Esq.....	5	1 0	31 T	33·15	192
D	Hesley Hall [Tickhill]	B. I. Whitaker, Esq....	8	0 7	60 T	31·94	196
	DERBY.						
D	Stapenhill [Burton]	R. W. Abbotts, Esq....	5	4 0	170	36·02	195
D	Bretby Park [,,]	Mr. G. Brunt.....	5	4 6	340	40·40	194
	Winshill [,,]	J. Matthews, Esq.....	5	1 0	272 T	37·12	108
	Melbourne	W. B. G. Tasker, Esq.	5	0 6	...	42·27	192
	,, ...	W. Garratt, Esq.	...	...	...	39·03	189
	Derby (Findern)	Rev. B. W. Spilsbury..	5	0 9	192 B	37·63	...
D	,, (Elvaston)	H. Chambers, jun. Esq	5	1 0	...	35·31	208
D	,, (Mickleover Manor)	Mr. J. Campbell.....	5	2 0	280	35·79	179
D	,, (Christ Church Vic.).....	Rev. W. H. Askwith...	5	1 0	265 ⅄	40·18	188
D	,, (Spondon)	J. T. Barber, Esq.....	5	0 7	272 T	37·33	194
	,, (Duffield).....	Mr. W. Bland	5	1 6	250 T	39·94	173
D	Milford	B. Cooper, Esq.	5	6 0	210 ?	43·43	204
	Ripley (Aldercar Hall).....	F. B. Wright, Esq. ...	5	4 3	...	38·13	186
D	Wirksworth (Biggin)	J. B. E. Blackwall, Esq	8	1 3	490 T	48·51	160
D	,, (Holloway)	R. Wildgoose, Esq. ...	5	1 0	450 T	50·09	215
†	Matlock (Willersley Gardens) ...	Mr. J. Tissington	6	1 3	440 T	44·66	...
†	,, Bath.....	Mrs. Chadwick	5	1 6	500 T	49·90	...
D	Stuffynwood Hall [Mansfield]...	J. Paget, Esq.	5	1 3	196 T	38·60	227
	Chesterfield (Hardwick Hall) ...	Mr. Wilson.....	8	1 6	594 T	41·53	234
D	,, (Grassmoor Colliery)	E. Bromley, Esq.	5	19 10	370 ⅄	34·86	210
	Chatsworth Gardens	T. Speed, Esq.	8	6 0	404	55·60	191
D	Chesterfield (Brampt'n S. Thomas)	Rev. J. M. Mello	5	3 0	314 T	38·36	181
D	,, (Gas Works)	C. E. Jones, Esq.	5	1 0	279	39·80	219

DIVISION VII.—NORTH-MIDLAND COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter.	Height Above Ground. ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1882 inches.	Days on which ·01 or more fell.
DERBY—(*con.*)							
Chesterfield	M. S. & L. R. Co.	9	3	6	248	31·33	131
†Buxton (Axe Edge)	Dr. E. J. Sykes	8	1	0	1620 B	55·95	...
D Chesterfield (Linacre Reservoir)	C. E. Jones, Esq.	8	3	6	490 T	38·28	207
,, (Brimington Hall)	R. G. Coke, Esq., C.E.	5	1	4	408 T	40·59	223
†Buxton (Devonshire Hospital)	Dr. E. J. Sykes	8	5	0	989 T	65·86	217
† ,, (,, ,,)	,, ,, ,,	5	1	0	986 T	65·89	217
†Stony Middleton	Rev. U. Smith	5	4	0	692 B	45·90	183
Barlow Reservoir	R. G. Coke, Esq., C.E.	5	4	3	612 T	38·78	199
†Comb's Moss	M. S. & L. R. Co.	9	3	6	1669 T	46·13	...
† ,, Reservoir	,, ,, ,,	9	3	6	710 T	46·74	230
†Chapel-en-le-Frith	,, ,, ,,	9	3	6	965 T	47·14	234
†Burbage House	The late Mr. J. Farrer.	5	2	10	1277 T	46·65	...
Kilnarsh (Norwood)	M. S. & L. R. Co.	9	3	6	238 T	35·62	132
†Castleton	Miss Hall	5	1	0	700	58·31	...
Hathersage (Bamford)	W. C. Moore, jun., Esq.	5	1	0	530 T	49·95	215
†Glossop (Spire Hollin)	F. Hawke, Esq.	10	0	10	612 T	53·72	...
†Woodhead	M. S. & L. R. Co.	9	3	6	878 T	64·54	239

DIVISION VIII.—NORTH-WESTERN COUNTIES.

CHESHIRE.							
D Nantwich (Cholmondelly Castle)	Mr. J. Malcolm	8	1	0	...	41·69	210
Chester (Pulford Hall)	R. Massie, Esq.	5	3	0	60 T	29·90	217
D Congleton (Buglawton Vic.)	Rev. W. Besant	8	5	0	347 T	42·90	205
Macclesfield (Wincle)	W. H. Stubbs, Esq., C.E.	5	3	0	500	52·30	122
Bosley Reservoir	M. S. & L. R. Co.	9	3	6	590 T	42·70	223
,, Minns	,, ,, ,,	9	3	6	1210 T	43·13	237
†Chester (Christleton Hall)	Mr. T. Weaver	...	...		...	34·29	...
,, (Lead Works)	A. O. Walker, Esq.	5	1	0	65 T	33·91	210
,, (,, ,, Field)	,, ,, ,,	5	1	0	67 T	34·17	213
D† ,, (Newton Nurseries)	J. Dickson & Sons	8	0	8	62 T	36·59	241
Middlewich (Bostock Hall)	Col. France Hayhurst	5	2	9	157 T	39·49	173
D Siddington (Thornycroft Hall)	Mr. E. Evans	5	3	0	377	43·24	206
Macclesfield (The Park)	Mr. J. Dale	5	1	0	501 T	47·72	223
D ,, (Park Green)	,, ,,	8	2	1	449 T	47·07	223
D Chelford (Astle Hall)	G. Dixon, Esq.	5	1	0	250 T	40·89	217
,, (,, ,,)	,, ,,	8	1	0	250 T	40·29	...
D Northwich (Highfield)	L. B. Wells, Esq., C.E.	8	3	4	118 T	40·11	218
,, (Winnington)	H. Neumann, Esq.	8	1	0	120 T	39·12	212
*Neston (Oakhill)	Reginald Bushell, Esq.	5	1	0	97 T	30·48	...
D* ,, (Hinderton)	,, ,, ,,	5	1	0	215 T	33·26	226
* ,, (,,) .....*monthly*	,, ,, ,,	8	1	0	215 T	33·40	...
D Frodsham (Foxhill)	J. Reynolds, Esq.	5	0	10	230 T	37·37	220
Bollington (Spond's Hill)	M. S. & L. R. Co.	9	3	6	1279 T	42·96	...
†Whaley	,, ,, ,,	9	3	6	602 T	54·14	231
D Runcorn (Weston Point)	L. B. Wells, Esq., C.E.	4	2	4	18	47·16	175

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height above Ground.	Rain Gauge. Height above SeaLevel	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
CHESHIRE—(*con.*)						
Lymm (Agden Hall)	Mr. D. Knight	5	1 0	190	42·72	206
Bowdon (Erlesdene)	J. Sidebotham, Esq.	8	0 6	211 ⊼	39·87	...
,, (The Firs)	R.Swindells, Esq., C.E.	5	0 8	215 ⊼	40·07	...
D Thelwall (Highfields)	T. G. Rylands, Esq.	5	1 0	118 ⊼	38·24	216
,, (,,) *monthly*	,, ,, ,,	5	1 0	118 ⊼	38·55	...
D Lymm (Statham Lodge)	P. Stubs, Esq.	5	1 0	42 ⊼	40·08	219
Altrincham (Norman's Place)	A. Griffith, Esq.	5	1 0	150 T	43·98	...
,, (Barrington House)	J. Newton, Esq., C.E.	8	3 0	105 ⊼	41·25	...
†Birkenhead (Bidstone Obs.)	J. Hartnup, Esq.	8	0 6	182 T	34·47	207
Northenden (Wythenshawe)	T. W. Tatton, Esq.	5	1 0	100 T	41·40	...
Marple Top Lock	M. S. & L. R. Co.	9	3 6	543 T	43·70	199
,, Aqueduct	,, ,, ,,	9	3 6	321 T	45·13	211
Sale (Brooklands)	J. F. Jordan, Esq.	5	5 6	130	46·15	...
Godley Reservoir	J.F.Bateman,Esq.FRS.	...	...	500	44·01	...
Newton	M. S. & L. R. Co.	9	3 6	396 T	42·43	218
Mottram (Hill End)	,, ,, ,,	9	3 6	680 T	51·42	204
,, (Matley's Field)	,, ,, ,,	9	3 6	399 T	53·03	248
Arnfield Reservoir	J.F.Bateman,Esq.FRS.	...	...	575	51·39	...
†Rhodes Wood Reservoir	,, ,, ,,	12	1 0	520	54·57	..
†Torrside Reservoir	,, ,, ,,	12	1 6	600	55·12	...
Staleybridge (Swineshaw)	,, ,, ,,	8	3 0	884 ⊼	60·15	...
†Woodhead Reservoir	,, ,, ,	12	0 10	680	60·22	...
LANCASHIRE.						
D Garston (Grassendale)	Miss E. C. Abraham	5	1 0	35 T	40·02	227
D Kelton (Aigburth)	J. Sing, Esq.	5	1 0	135 T	40·20	247
D Liverpool (Roseleigh, Woolton)	A. Tate, Esq.	12	4 6	170 B	49·82	191
D ,, (St.Michael's Hamlet)	G. W. Jevons, Esq.	5	1 0	74 T	38·36	203
D Warrington (Arpley)	T. Longdin, Esq.	10	10 3	33 ⊼	39·45	217
,, (Cemetery)	,, ,, ,,	10	1 0	32 ⊼	42·34	...
D Heaton Moor [Stockport]	J. P. Lynill, Esq.	5	1 4	236	42·64	...
Liverpool (Grove Park)	J. R. Darsie, Esq.	3	6 0	160	38·86	218
,, (St. James's Mount)	Rev. W. Banister	5	1 1	150 ⊼	36·67	...
D ,, (Walton-on-the-Hill)	WHAndersson,jun,Esq	5	1 11	119 ⊼	37·59	221
,, (,, ,, ,,)	,, ,, ,,	8	1 2	119 B	37·64	221
D Manchester (Withington)	J. King, Jun., Esq.	5	1 0	110 T	41·70	205
D ,, (,,)	,, ,, ,,	5	1 0	110 T	41·81	205
D ,, (,,)	,, ,, ,,	8	...	110 T	40·89	205
D ,, (,,)	J. Nodal, Esq.	12	6 2	142 ⊼	38·83	203
D ,, (Stretford)	H. Royle, Esq.	5	1 0	86 ⊼	40·88	223
,, (Urmston)	T. Armstrong, Esq.	5	1 0	80 T	40·17	212
Denton Reservoir	J.F.Bateman,Esq.FRS.	...	...	324 T	43·43	...
Gorton	,, ,, ,,	...	...	263 T	40·56	...
D Manchester (Plymouth Grove)	J. F. Roberts, Esq.	5	4 2	150 ⊼	42·70	224
D ,, (Ardwick)	J. Casartelli, Esq.	9	3 0	140 ⊼	43·53	209
† ,, (Piccadilly)	M. S. & L. R. Co.	9	40 0	194 T	46·20	203
,, (Fairfield)	,, ,, ,,	9	6 0	312 T	46·77	216
D ,, (Alexandra Park)	Rev. L. C. Casartelli	8	82 11	176 B	38·43	214

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
LANCASHIRE—(*con.*)						
D Eccles (Monton Green)	W. G. Birchley, Esq...	5	4 0	100 T	53·16	224
Blundellsands (Park Corner)	T. M. Reade, Esq. C.E.	5	1 0	35 ⅄	35·89	224
D Manchester (Ashfield Pendleton)	Miss Withington	5	0 7	180	46·79	223
D ,, (Newton Heath)	J. Warren, Esq.	5	1 0	288 T	51·22	243
Ashton (Waterhouses)	M. S. & L. R. Co.	9	3 6	345 T	51·04	224
*Maghull	I. Roberts, Esq.	5	1 0	68 ⅄	39·93	221
Manchester (Prestwich)	The Meteor. Council ...	8	1 0	295	49·62	225
,, (,, Res.)	J.F.Bateman,Esq.FRS.	...	...	347 T	46·31	...
Oldham (Gas Works)	,, ,, ,, ...	5	4 0	600 T	49·83	...
,, (Brushes Clough)	,, ,, ,, ...	5	4 0	950 T	54·58	...
D Wigan Waterworks	W. Bolton, Esq.	8	1 6	225 T	45·30	220
Bolton-le-Moors (The Folds)	H. H. Watson, Esq. ...	10	3 6	286 T	54·07	...
D ,, (Hampden St.)	J. Rigby, Esq.	5	4 6	350	61·08	243
,, (Heaton)	R.H.Swindlehurst,Esq.	6	1 3	500	49·50	260
D ,, (,,)	J. S. Holdsworth, Esq.	10	3 6	497 ⅄	54·39	231
D ,, (Hurst Bank)	J. Watkins, Esq.	5	3 10	442 ⅄	52·56	243
,, (Moss Bank)	R. H. Ainsworth, Esq..	8	1 8	570 T	59·24	204
,, (Smithill'sHall)	,, ,, ,, ...	8	1 2	515 T	58·31	213
,, (Belmont Road)	Rev. T. Mackereth ...	5	1 10	481 ⅄	61·73	248
Bury (Gin Hall)	T. Rigby, Esq.	8	1 0	475	53·26	200
Rochdale (Castleton Vic.)	Rev. J. Chadwick Bates	8	1 0	480 ⅄	45·22	160
Milnrow (Piethorne)	J.F.Bateman, Esq. FRS	5	4 0	800 T	48·49	...
Rochdale (Park Observatory)	Dr. Henry	...	...	...	53·61	...
D Ormskirk (Rufford)	J. Porter, Esq.	5	0 8	38 T	39·65	218
Bolton (Belmont)	R.H.Swindlehurst,Esq.	6	0 9	800	76·70	268
Rochdale (Nayden Dane)	J. Diggle, Esq., C.E....	5	1 6	900 T	47·18	...
Southport (Liverpool Road)	J. Baxendell, Esq.	5	2 8	23 ⅄	40·34	202
Entwistle	R.H.Swindlehurst,Esq.	7	1 0	700	67·30	255
Rochdale (Littleborough)	C. R. Dykes, Esq.	10	1 6	600	46·10	...
Blackstone Edge	,, ,, ,,	10	1 9	1225	54·10	...
,, ,, (Canal Summit)	,, ,, ,,	10	1 11	700	46·80	...
,, ,, (Chelbourn)	,, ,, ,,	10	1 3	800	53·50	...
,, ,, (Lenches)	,, ,, ,,	10	1 9	800	44·10	...
D Chorley (Whittle-le-Woods)	Theodore Hare, Esq. ...	5	2 6	265 T	46·30	209
Haslingden (Holden Wood)	T. Rigby, Esq.	8	1 0	670	65·20	197
,, (Calf Hey)	,, ,,	8	1 0	800	65·15	...
Chorley (Withnell Hall)	J. Shackleton, Esq. ...	5	0 6	545	53·36	...
Over Darwen (Sunnyhurst Hey)	T. Duxbury, Esq.	8	2 0	915 T	65·12	178
D ,, ,, (St. James's Vic.)	Rev. W. H. Blamire...	5	1 0	564 ⅄	60·55	215
,, ,, (Hoddlesden Res.)	W. B. Bryan, Esq., C.E	8	4 0	680	63·98	203
,, ,, (Daisy Green)	,, ,, ,,	8	1 0	969 ⅄	58·59	192
,, ,, (Pickup Bank)	,, ,, ,,	8	1 0	720 ⅄	59·01	192
D† The Hall [Todmorden	H. C. Taylor, Esq. M.D	5	1 0	400 ⅄	65·98	243
Blackburn (Guide Reservoir)	W. B. Bryan, Esq. C.E.	8	1 0	650	47·14	200
Oswaldtwistle	R. Hall, Esq.	10	0 6	635 T	63·23	217
D Lytham (Woodville Terrace	S. Stott, Esq.	8	2 1·	...	40·53	249
Blackburn (Pleasington)	J. Wilson, Esq. C.E. ...	8	2 6	232 ⅄	48·25	...
,, (Witton)	,, ,, ,,	8	2 6	315 ⅄	50·13	212

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet	Depth of Rain. 1882 inches.	Days on which ·01 or more fell.
LANCASHIRE—(*con.*)							
†Blackburn (Store Yard)	W. B. Bryan, Esq., C.E.	8	30	0	373 ⊼	41·60	199
,, (Water Works Office)	,, ,, ,,	8	60	0	436 ⊼	38·06	200
,, (Pumping Station)	,, ,, ,,	8	6	0	610 ⊼	53·44	197
Accrington (Warmden Reservoir)	R. Crossley, Esq.	8	1	9	650 T	56·36	112
D ,, (Washington House)	E. Knowles, Esq.	5	30	0	530 ⊼	54·09	218
Preston (Corporation Offices)	H. Reah, Esq.	8	16	0	123	44·95	207
†Rawtenstall (Clough Bridge Res.)	T. Rigby, Esq.	8	1	0	900 ⊼	59·54	247
Huncoat (Burnley Road Res.)	C. Harrison, Esq.	9	1	6	620 ⊼	52·56	...
†Burnley (Rosegrove Cemetery)	W. B. Bryan, Esq., C.E.	8	1	0	493 ⊼	52·33	202
,, (Mechanics' Inst.)	,, ,, ,,	...	61	0	441 ⊼	27·96	238
† ,, (Yorkshire Street)	W. Williamson, Esq.	8	20	0	420 ⊼	56·50	253
,, (Simonstone)	W. B. Bryan, Esq., C.E.	5	1	0	366 ⊼	51·58	237
† ,, (Swinden Upper)	W. Williamson, Esq.	8	12	0	820 ⊼	57·46	251
† ,, (,, Lower)	,, ,, ,,	8	2	0	745 ⊼	57·23	251
† ,, (Extwistle Moor)	,, ,, ,,	8	1	0	1310 T	62·39	...
† ,, (Hey Slacks)	,, ,, ,,	8	1	0	1385 T	65·47	...
† ,, (Briercliffe Vicarage)	Rev. R. D. H. Gray	5	1	0	680 ⊼	53·64	248
Alston	H. Reah, Esq.	8	1	2	320 ⊼	55 75	...
Blackpool (South Shore)	G. Sharples, Esq.	10	1	8	29	42·05	...
D ,, (Arnold House)	T. Ward, Esq.	5	1	0	32 ⊼	41·42	226
Kirkham (Weeton)	J. Bradley, Esq.	10	1	0	95 T	43·59	...
D Whalley (Sabden)	J. H. Calvert, Esq.	5	2	6	500	57·33	229
D Eccleston (Elswick Lodge)	S. King, Esq.	10	1	4	55 T	42·88	216
,, (,, ,,)	,, ,, ,,	5	1	0	55 T	40·82	...
D Stonyhurst College	Rev. S. J. Perry, F.R.S.	11	1	0	376 ⊼	60·23	222
,, ,,	The Meteor. Council	11	2	0	377 ⊼	59·96	225
,, ,, *monthly*	Rev. S. J. Perry, F.R.S.	11	1	0	376 ⊼	61·42	...
Preston W. Works. Knowl Green	H. Reah, Esq.	8	1	2	400 T	55·31	...
Loud-scales	,, ,,	8	1	2	400 T	57·56	...
Spade Mill	,, ,,	8	1	2	400 T	54·30	...
Jeffrey Hill	,, ,,	8	1	2	900 T	60·01	...
D St. Michael's-on-Wyre	Rev. P. J. Hornby	5	0	11	26 ⊼	43·31	216
D ,, ,, ,,	,, ,, ,,	5	1	0	26 ⊼	44·72	217
D Clitheroe (Low Moor)	W. Garnett, Esq.	5	1	10	175 T	58·60	204
D Garstang (Calder Mount)	C. Wilson, Esq.	5	10	0	100 T	60·13	230
Clitheroe (Downham Hall)	R. Assheton, Esq.	10	1	6	464 ⊼	54·68	...
D Garstang (Vale House)	J. Jackson, Jun., Esq.	6	4	3	455 ⊼	50·83	212
,, (Winmarleigh Vic.)	Rev. T. B. Armitstead	5	1	0	53 T	37·94	...
,, (Barnacre Reservoir)	J. Bradley, Esq.	10	1	0	617 ⊼	55·49	...
,, (Grizedale)	,, ,, ,,	10	1	0	519 T	51·57	...
D Lancaster (South Field)	W. Roper, Esq.	12	3	6	114 ⊼	46·60	215
,, (Escowbeck, Caton)	A. Greg, Esq.	12	2	0	150 T	46·00	148
,, (Halton Park)	,, ,,	8	2	6	240 T	43·30	141
,, (Hest Bank)	T. Ransome, Esq.	5	2	0	58 T	44·39	229
D Wray	Rev. C. L. Reynolds	5	1	1	165 T	53·05	224
D Melling (Hornby Castle)	J. Jowett, Esq.	8	1	8	100 T	50·55	233
Barrow-in-Furness	W. Fergusson, Esq.	11	1	6	36 ⊼	45·04	238

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
LANCASHIRE—(*con.*)						
D Barrow-in-F'ness(Cavendish Pk)	W. S. Whitworth, Esq.	8	1 0	60 ⅄	43·67	205
Arkholme (Storr's Hall)	F. F. Pearson, Esq. ...	5	1 0	220 T	51·37	...
D Ulverston (Urswick)	Rev. R. B. Billinge ...	5	3 0	...	53·53	230
Cartmel (Flookburgh)	T. R. Croasdale, Esq...	5	2 7	70 B	46·71	155
† ,, (Holker)	Mr. W. Fox	8	4 8	155 ⅄	50·96	214
Grange (Nutwood).....	Rev. E. Massie	5	2 5	100	48·19	232
D Ulverston (Powka Beck)	Mr. W. Fergusson.....	11	1 6	512 T	65·52	235
D Cartmel (Pit Farm)	Mr. W. R. Nash	5	1 0	122 T	55·42	211
,, (Broughton Hall)	Col. Ainsworth	5	2 8	210 T	57·26	226
D Ulverston (Colton).....	Rev. A. Christopherson	5	1 0	226 ⅄	65·06	207
D Broughton-in-Furness	Rev. F. A. Malleson ...	5	1 3	40 T	69·44	172
Coniston (Torver Rectory)	Rev. T. Ellwood	5	0 6	400 T	75·47	...
†Monk Coniston Park	V. Marshall, Esq.	10	4 11	150 ⅄	81·30	...
D ,, ,, ,, ...	,, ,, ,, ...	5	1 0	305	95·50	258
Hawkshead.....	W. Lane, Esq.	5	1 2	280 T	66·09	195

DIVISION IX.—YORKSHIRE.

WEST RIDING.						
Sheffield (Brincliffe Rise)	A. W. Chadburn, Esq..	5	1 0	500 T	42·17	219
D ,, (Nether Edge)	J. Reaney, Esq.....	9	3 0	...	39 74	207
,, (The Edge).....	M. S. & L. R. Co.	9	3 6	336 T	43·36	216
† ,, (Redmires)	J. Gunson, Esq.....	10	5 0	1100 T	51·34	240
,, (,,) ..... *weekly*	,, ,, ...	8	4 0	1100 T	51·33	...
D ,, (Tylecote, Ranmoor) ...	J. Dixon, Esq.	10	3 6	610 ⅄	54·71	230
D ,, (Broomhall Park)	D. Doncaster, Jun. Esq	10	2 0	330 ⅄	40·06	239
,, (Rivelin).....	J. Gunson, Esq.....	10	4 0	564 ⅄	46·77	231
,, (,,) ..... *weekly*	,, ,, ,, ...	8	4 0	564 ⅄	46·26	...
,, (Crookes).....	,, ,, ,, ...	10	2 0	629 ⅄	38·87	221
,, (,,) ..... *weekly*	,, ,, ,, ...	8	2 0	629 ⅄	39·10	...
D†Rotherham (Ulley Reservoir) ...	Mr. L. Berry	5	1 0	184 ⅄	28·72	169
Sheffield (New Shoreham Street).	The Meteor. Council ..	5	10 0	269	31·92	220
† ,, Station.....	M. S. & L. R. Co.	9	3 6	188 T	30·70	205
,, (Tinsley Locks)	,, ,, ,, ...	9	...	143 T	31·19	204
Tickhill (Sandbeck Park)...	The Earl of Scarborough	5	1 0	150 T	34·02	214
†Rotherham (Moorgate Grove) ...	R. Chrimes, Esq.	5	1 0	262 ⅄	34·81	174
D ,, (Thrybergh)	B.S.Brundell,Esq.,C.E.	8	1 1	188 ⅄	28·06	178
D Tickhill	G. G. Phillips, Esq. ...	8	1 0	61 ⅄	34·59	211
D Sheffield (Chapeltown)	Mr. D. Bell.....	8	5 0	582 L	36·45	218
D Doncaster (Firsby).....	B.S.Brundell,Esq.,C.E.	8	1 3	189 ⅄	32·13	178
D Bolsterstone (Waldershaigh) ...	C. M. Wilson, Esq.....	8	3 1	950 T	42·10	224
Elsecar	M. S. & L. R. Co.	9	...	175 T	33·80	186
D Wath-upon-Dearne (Chapel St).	Dr. Burman	8	1 0	185 ⅄	34·90	224
,, (West Melton)	W. Jackson, Esq.	6	0 10	172 T	35·68	...
D ,, ...	J. N. Baxter, Esq.....	5	1 0	100 ⅄	34·75	201
Worsborough	M. S. & L. R. Co.	9	...	225 T	33·13	194
D Stainborough(Wentworth Castle)	W. Fisher, Esq.....	8	2 6	520 T	37·42	204

DIVISION IX.—YORKSHIRE—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WEST RIDING—(*con.*)						
Doncaster	M. S. & L. R. Co.	9	...	35 T	26·72	190
D ,, (Magdalens)	Mr. J. Howorth	5	4 6	46 T	32·52	185
†Dunford Bridge Station	M. S. & L. R. Co.	9	3 6	954 T	54·72	227
D† ,, ,, (Reservoir)	Mr. G. Whitfield	12	2 0	1100 T	62·74	253
† ,, ,, (,,)	,, ,, ,,	8	2 1	1100 T	64·67	...
†Penistone (Carlcotes)	M. S. & L. R. Co.	9	3 6	1075 T	51·93	222
† ,,	,, ,, ,,	9	3 6	717 T	40·33	200
,, (Hazlehead)	,, ,, ,,	9	...	868 T	57·96	184
Holmbridge (Batley W. W.)	J.F.Bateman, Esq. FRS	...	...	917 T	71·80	...
D Barnsley (Church Street)	Dr. Sadler	5	5 2	350 ⅄	35·40	207
,,	M. S. & L. R. Co.	9	...	175 T	29·15	171
Saddleworth Station	E. B. Smith, Esq., C.E	9	4 0	610 T	55·00	...
Strinesdale [Oldham]	J.F.Bateman, Esq. FRS	5	4 0	800 T	46·68	...
†Meltham (Harden Moss)	J. Stanway, Esq.	8	1 2	1200 T	54·04	...
Standedge (Red Brook)	E. B. Smith, Esq., C.E.	9	1 6	1100 ⅄	64·55	...
Denshaw	J.F.Bateman, Esq. FRS	5	4 0	1050 T	53·58	...
D Meltham (Harewood Lodge)	C. L. Brook, Esq.	8	4 8	514 L	49·29	236
† ,, Grange	J. Stanway, Esq.	8	1 2	925 T	49·81	...
Doncaster (Hatfield)	Mr. T. Askeren	5	5 4	...	29·97	174
D ,, (Kirk Bramwith)	B.S.Brundell, Esq. C.E.	5	1 0	17 ⅄	31·60	195
D ,, (Burghwallis Rec.)	Rev. F. W. Peel	5	0 6	80 ?	33·81	195
D Slaithwaite (Blackmoorfoot)	J. Stanway, Esq.	8	1 0	800 T	46·32	229
Huddersfield (BankField, Golcar)	J. E. Ramsden, Esq.	5	0 8	400 T	49·70	226
,, (Cemetery)	J. Firth, Esq.	12	1 2	400 T	39·79	204
D† ,, (Dalton)	J. W. Robson, Esq.	8	1 0	350 ⅄	37·24	226
Longwood (Bilberry Edge)	J. Stanway, Esq.	8	1 2	1100 T	46·23	...
D Mirfield (Cote Wall)	E. B. W. Balme, Esq.	8	0 9	200	36·80	193
Wakefield (Hardy Croft)	J. Sykes, Esq.	8	1 0	100 T	33·87	199
D† ,, Prison	Dr. H. Clarke	8	1 0	96 ⅄	33·30	222
,, (Alverthorpe Hall)	H. Clarkson, Esq.	5	1 0	150 T	32·00	199
D Rastrick	A. Clay, Esq.	5	1 3	410 T	37·31	210
Pontefract (Fern Hill)	A. T. Barker, Esq.	5	2 0	120 T	30·34	...
D Wakefield (Stanley Vicarage)	Rev. R. Burrell	5	1 0	100 T	30·83	200
,, (Field Head)	J. Parkinson, Esq.	8	1 0	150 T	31·28	205
D Goole	R. G. Boyd, Esq.	5	1 0	18 T	28·61	188
,, (Tillage Works)	Mr. J. Harrison	5	1 3	19	34·44	201
D†Todmorden (Stansfield Hall)	J. Fielden, Esq.	8	1 9	584 T	66·12	242
D Halifax (BermersideObservatory)	J. Gledhill, Esq.	8	0 6	500	44·92	224
,, (Thorpe)	F. G. S. Rawson, Esq.	8	0 8	365 T	55·25	...
† ,, (Albert) 26	J. A. Paskin, Esq., C.E.	5	1 0	795 T	46·74	...
† ,, (Gibbet) 27	,, ,, ,,	5	6 0	568 T	43·29	...
† ,, (Ramsden Wood) 28	,, ,, ,,	8	1 2	816 T	50·06	...
Leeds (Methley Park)	J. Richardson, Esq. C.E.	5	0 9	98	36·20	183
,, (Leventhorpe Hall)	J. T. Leather, Esq., C.E.	10	4 0	94 ⅄	28·29	...
Halifax (Castle Carr)	J. A. Paskin, Esq., C.E.	...	...	950 T	48·01	...
† ,, (Midgley Moor) 29	,, ,, ,,	7	0 6	1350 T	62·65	...

The figures in this type 26 refer to the Map facing page 50 of *British Rainfall*, 1876.

DIVISION IX.—YORKSHIRE—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WEST RIDING—(*con.*)						
† Halifax (Warley Moor) 30	J. A. Paskin, Esq., C.E.	7	0 6	1425 T	59·49	...
† ,, (Ogden) 31	,, ,, ,, ...	8	1 3	990 T	58·08	...
,, (Ovenden) 32	,, ,, ,, ...	...	...	1375	58·61	...
,, (Widdop)	,, ,, ,, ...	...	...	1050	59·48	...
† ,, (Walshaw Dean).....41	,, ,, ,, ...	8	0 3	1380 T	59·58	...
D South Milford Rectory	Rev. F. J. Young	5	1 4	60 T	34·33	213
Leeds (Wortley Res.)	E. Filliter, Esq., C.E...	8	0 9	307 ⊼	39·72	213
Bradford (Queensbury).....40	W. Foster, Esq.....	8	2 2	1050 ⊼	49·46	192
,, (Brayshaw Reservoir) 2	A. R. Binnie, Esq., C.E.	5	1 0	982 ⊼	44·89	221
,, (Town Hall)	J. McLandsborough, Esq	5	1 0	326 ⊼	43·22	233
,, (The Exchange).....34	,, ,, ,, ...	8	65 6	395 ⊼	39·69	237
,, (Midland Station)	,, ,, ,, ...	5	0 10	319 ⊼	42·99	233
,, (Farcliffe)	E. Milnes, Esq.	5	0 0	575 T	41·73	234
,, (Stubden) *old gauge* 8	A. R. Binnie, Esq., C.E ..	8	1 0	1075 ⊼	64·11	260
,, (,,)....8	,, ,, ,, ...	5	1 0	1071 ⊼	59·28	260
,, (Brown Royd Res.)...1	,, ,, ,, ...	5	1 0	385 T	37·19	214
,, (Nan's Scar) 11	,, ,, ,, ...	5	1 0	1101 T	45·52	...
,, (Stairs) 14	,, ,, ,, ...	5	1 0	1401 ⊼	59·70	...
,, (Leeming Res.) 12	,, ,, ,, ...	5	1 0	850 ⊼	44·97	...
,, (Doe Park) *old gauge* 7	,, ,, ,, ...	8	1 0	810 ⊼	53·74	240
,, (,, ,,) 7	,, ,, ,, ...	5	1 0	811 ⊼	51·38	240
,, (Leeshaw Reservoir) 13	,, ,, ,, ...	5	1 0	875 ⊼	49·76	...
,, (Chellow Dean) 4	,, ,, ,, ...	5	1 0	645 ⊼	43·16	215
,, (Hewenden Reservoir)6	,, ,, ,, ...	5	1 0	701 ⊼	44·05	234
,, (,, ,,) *old g.*6	,, ,, ,, ...	5	1 0	700 T	48·02	234
,, (Heaton Res.) *old gauge*5	,, ,, ,, ...	8	1 0	530 ⊼	40·69	200
,, (,, ,,) 5	,, ,, ,, ...	5	1 0	531 ⊼	40·67	200
†Leeds (Holbeck).....	Messrs. Marshall & Co.	10	32 0	127 ⊼	31·45	202
D ,, (,,).....	,, ,, ,, ...	5	1 8	95 ⊼	32·59	202
,, (,, W. Works Depot)	E. Filliter, Esq., C.E..	8	0 9	93 ⊼	34·29	211
,, (Woodhouse Moor).....	,, ,, ,, ...	8	0 9	307 ⊼	36·65	199
D ,, (,, Cliff)	R. Reynolds, Esq.....	5	1 0	330	32·68	219
,, (Elmete Hall, Roundhay).	J. Kitson, Esq.	5	1 6	400 T	37·08	235
,, (Weetwood Reservoir) ...	E. Filliter, Esq., C.E...	8	0 9	328 ⊼	34·88	202
D ,, (,, Hall)	H. C. Marshall, Esq....	5	0 7	400 ⊼	36·35	231
Shipley (Moor Head).....	G. Knowles, Esq.	8	10 0	500	35·02	...
D Leeds (Allerton Hill)	T. Fenwick, Esq., C.E.	5	0 7	418 ⊼	34·66	...
D ,, (Oliver Hill, Horsforth)...	C. France, Esq.....	3	0 9	250 T	37·39	233
D ,, (Crag Hill, Horsforth) 36	J. Fox, Esq., C.E.	5	1 0	350 ⊼	36·87	241
D Shipley (Esholt Vic.).....	Rev. J. Myddleton Evans	8	1 2	...	38·03	221
Bingley (The Grange)	W. D. McKie, Esq. ...	5	0 11	430	41·36	239
Leeds (Eccup)	E. Filliter, Esq., C.E...	8	0 9	343 ⊼	32·17	212
,, (,,).....	,, ,, ,, ...	8	0 9	395 T	35·22	214
†Bingley (Sunnydale).....	A. R. Binnie, Esq., C.E.	5	1 0	980 T	43·47	234
Skipton (Rye Croft, Crosshills)42	G. Parkinson, Esq. ...	8	1 0	405 ⊼	53·45	206
Harewood (Arthington)	E. Filliter, Esq., C.E...	8	0 9	139 ⊼	36·94	213
Skipton (Gill Grange, Silsden) 15	A. R. Binnie, Esq., C.E.	5	1 0	883 T	38·94	...
†Ilkley (Cherry Bank)	H. Richardson, Esq. ...	8	1 3	600	48·12	...

DIVISION IX.—YORKSHIRE—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WEST RIDING—(*con.*)						
D†Ilkley (Carcroft)	T. J. Call, Esq., M.D..	5	0 8	350	48·10	222
D† ,, (West Parade) 37	Mr. J. Hainsworth.....	5	8 9	278 ⊼	44·84	207
,, (Myddelton Lodge)	Mr. W. Scales.....	5	1 0	500	45·86	137
Skipton (Silsden Reservoir) ...16	A. R. Binnie, Esq., C.E.	5	1 0	560 ⊼	42·45	225
D Thornton-in-Craven	T. Wilson, Esq.....	5	5 4	456 ⊼	49·81	240
Slaidburn (Hareden Brook)	H. Reah, Esq., ...	8	1 2	540	81·02	...
,, (Langden Brook).....	,, ,, ...	8	1 2	556	82·00	...
,, (Whiteholme)	Mrs. Birchall	5	1 3	475 T	67·76	190
Skipton (Cringle's Reservoir) 17	A. R. Binnie, Esq., C.E.	5	1 0	760 T	43·05	225
,, (Counter Hill) 18	,, ,, ,, ...	5	1 0	951 T	40·19	...
,, (Chelker Reservoir)...19	,, ,, ,, ...	5	1 0	730 ⊼	45·35	...
,, (*Craven Herald* Office)...	E. Townsend, Esq.....	8	0 8	360	45·65	239
Slaidburn (Dunsop Houses)	W. B. Bryan, Esq., C.E.	8	1 0	450 ⊼	78·67	197
,, (Middle Knoll).....	,, ,, ,, ...	8	2 6	1298 ⊼	74·30	...
,, (Brennand)	,, ,, ,, ...	8	1 0	820 ⊼	72·76	201
,, (Whitendale)	,, ,, ,, ...	8	1 0	830 ⊼	81·32	198
,, (Cabin Hill).....	,, ,, ,, ...	8	3 1	1559 ⊼	72·00	...
,, (Baxton Fell)	,, ,, ,, ...	8	2 6	1540 ⊼	61·00	...
York (Phil. Soc. Gardens)	The Meteor. Council ...	8	1 9	53 T	33·35	210
,, (,, ,, ,,)	,, ,, ,, ...	8	1 9	53 T	33·15	212
,, (Park Street, The Mount).	J. Burtt, Esq.	5	1 0	45 T	30·36?	...
,, (Cherry Hill)	H. Richardson, Esq. ...	5	1 6	60	32·94	...
Wetherby (Ribston)	Mr. Jones	5	1 2	130 ⊼	33·02	134
Skipton (Barden Res.) *old g.* 20	A. R. Binnie, Esq., C.E.	8	1 2	746 ⊼	53·68	252
,, (,, ,,) 20	,, ,, ,, ...	5	1 0	746 ⊼	53·39	252
Otterburn-in-Craven.....	W. Gomersall, Esq. ...	5	1 0	510 ⊼	53·46	191
Skipton (Upper Res., Barden) 21	A. R. Binnie, Esq., C.E.	5	1 0	1250 ⊼	50·02	250
PateleyBdg(GrimwithRes)*old*y24	,, ,, ,, ...	8	1 0	890 ⊼	56·10	249
,, ,, (,, ,,) ...24	,, ,, ,, ...	5	1 0	893 ⊼	54·84	249
,, ,, (,,Trunla Hill)25	,, ,, ,, ...	5	1 0	1201 ⊼	43·02	...
D ,, ,, (Castle Stead).....39	Mr. A. C. Young	5	1 0	410 ⊼	51·53	226
Boroughbridge (Aldborough) ...	Rev. R. W. Marriott...	5	2 6	80 T	31·58	...
D Malham Tarn.....	Mr. Coulthard	5	1 0	1296 ⊼	73·03	264
Settle (Austwick Hall)	T. Clapham, Esq.	12	4 0	547	49·53	...
,, (Clapham).....	Rev. M. T. Farrer.....	8	5 7	565 T	52·13	...
D†Ripon (The Red House)	F. D. Wise, Esq.	5	1 0	120	26·75?	...
D Ingleton (Halsteads).....	R. Chapman, Esq.....	9	2 0	414 T	59·66	212
D Arncliffe.....	Ven. Archdeacon Boyd	8	1 6	750 T	77·21	260
,, (Halton Gill)	Mr. S. Clarke.....	5	4 6	1010	68·85	...
D Ripon (High Bank, Mickley) ...	Miss Harrison	5	1 0	225 T	37·89	178
D Ingleton (Chapel-le-Dale).....	Rev. A. Relton	5	2 0	800 T	77·76	...
Oughtershaw (Swarthghyll).....	C. H. L. Woodd, Esq..	8	1 4	1350 T	86·20	...
D†Sedbergh (Brig Flatts).....	J. Handley, Esq.	5	1 0	300 T	57·66	225
D ,, (Long Lane)	J. Dockeray, Esq.	5	4 4	420 T	58·13	243
† ,, (Thorne Hall)	Miss Elam	5	1 0	400 T	56·62	219
EAST RIDING.						
Patrington (Spurn Head)	The Meteor. Council ...	8	1 0	27	24·07	186

DIVISION IX.—YORKSHIRE—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell
			ft. in.	feet.	inches.	
EAST RIDING—(*con.*)						
D Patrington	W. B. Pugh, Esq.	5	0 3	10 ⅄	33·40	181
Hull (Nelholme, Ferriby)	W. R. King, Esq.	...	...	...	35·50	...
,, (Spring Bank)	H. B. Turner, Esq.	5	1 8	8 T	30·94	180
D† ,, (Beverley Road)	H. Smith, Esq.	8	4 6	11 T	33·91	205
D ,, (Derringham)	W. Lawton, Esq.	5	2 2	10 ⅄	33·28	216
D ,, (People's Park)	Mr. E. Peak	5	0 6	6	35·60	204
D Brough (Brantinghamthorpe)	Mr. R. C. Kingston	5	2 0	200 T	40·75	...
D Cottingham	J. H. Hill, Esq.	8	1 3	26 T	32·47	258
Beverley (Alexandra Terrace)	T. Dyson, Esq.	12	8 0	62 ⅄	36·26	180
D ,, (Tickton)	A. Helsham Jones, Esq.	5	1 0	11 T	34·54	192
D Market Weighton (Dalton Hall)	Mr. J. Allsop	8	1 4	150	37·76	...
D ,, ,, (Holme on the Wolds)	Mrs. Harland	5	4 0	154 ⅄	36·06	...
D Hornsea (East Gate House)	J. A. Wade, Esq.	5	3 0	40 ?	30·56	122
Middleton-on-the-Wolds	Rev. H. D. Blanchard	5	1 0	150 T	43·01	220
D Pocklington (Warter)	J. Coxon, Esq.	5	1 10	230 T	40·14	191
Catton Rect. [York]	Rev. H. L. Puxley	4	...	...	34·36	...
Driffield (Beverley Road)	Rev. J. T. Harwood	8	8 0	...	32·95	214
D Thixendale	Rev. W. H. Fox	10	0 9	425 T	43·19	217
Lowthorpe (The Elms)	H. Onslow Piercy, Esq.	5	1 0	63 ⅄	35·38	180
D Hunmanby (Foxholes Rectory)	Rev. R. H. Foord	5	1 0	234 T	39·37	216
Ganton Hall [Scarborough]	Mr. J. Shields	5	1 0	200 T	35·41	192
NORTH RIDING.						
†Malton	H. Hurtley, Esq.	10	1 0	75 T	34·17	...
D Thirsk (Sowerby)	C. M. Swarbreck, Esq.	5	1 0	105 T	32·26	205
D ,, (,,)	A. C. Bamlett, Esq.	5	1 0	118	32·70	192
Helmsley	R. Bruce Low, Esq., M.D.	5	1 3	...	39·08	207
D Bedale (Thorpe Perrow)	Mr. W. Culverwell	5	1 6	170	31·19	190
D Bishopdale (The Rookery)	Mr. J. Loving	5	1 0	605	66·48	259
Aysgarth (Nell Bank, Walden)	Rev. F. W. Stow	3	1 0	1075 T	56·32	...
Hawes Junction	The Meteor. Council	8	1 0	1115	77·54	265
D Aysgarth Vicarage	Rev. F. W. Stow	8	1 0	659 ⅄	47·04	235
Leyburn (Wensley)	G. W. Wray, Esq.	7	1 0	660 T	40·80	232
D ,, (,,)	Mr. H. Pearson	5	2 6	...	40·98	152
Scarborough (Osgodby)	E. Filliter, Esq., C.E.	8	0 9	159 T	31·28	146
D ,,	W. C. Hughes, Esq.	8	1 0	130	31·76	203
,, (St. Nicholas)	The Meteor. Society	5	1 0	157 T	33·54	209
Hambleton Hills (High Paradise)	A. C. Bamlett, Esq.	5	1 0	1050	36·47	179
D†Hawes (Hardrow Vicarage)	Rev. R. Pinck	5	1 0	790 ⅄	61·57	237
Swaledale (Summer Lodge)...[2]	Mr. Broderick	5	1 0	1041 T	62·23	...
*Northallerton	Dr. Hodgson	5	1 3	133 ⅄	31·26	...
Catterick (Tunstall)	H. C. Marshall, Esq.	5	1 0	350	28·82	...
FylingdalesMoor(Harw'daleMill)	E. Filliter, Esq., C.E.	8	0 9	275 T	39·18	155
Richmond (The Grove)	G. Roper, Esq.	5	1 3	...	41·01	135
Northallerton (Rounton Grange)	I. L. Bell, Esq., F.R.S.	8	0 7	200	35·50	212
Reeth (Eskeleth House) ....[3]	W. Whitwell, Esq.	8	1 0	947 T	50·70	...
D East Layton [Darlington]	Mrs. Maynard	5	1 0	575 T	32·91	207
D Richmond (Forcett Park)	J. Michell, Esq.	5	1 0	360 T	35·52	209

DIVISION IX.—YORKSHIRE—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
NORTH RIDING—(*con.*)						
Whitby (Guisborough Road) ...	M. Simpson, Esq.	5	2 0	184 ⅄	26·61	154
Saltburn (Port Mulgrave)	J. Hodgson, Esq.	5	4 6	350 T	27·63	173
D Guisborough (Hutton Hall)	Sir J. W. Pease, Bt., M.P.	5	1 6	400 T	39·86	188
D ,, (Lockwood Beck Res.)	W. I'Anson, Esq., C.E.	8	1 0	632 ⅄	38·34	192
,, (,, ,, ,,)	,, ,, ,, ...	8	1 0	632 ⅄	37·74	...
†Red Gill [Brough].....[12]	G. J. Symons, Esq. F.R.S.	8	1 0	1400 T	49·85	...
†Balder Head [Brough] .....[11]	,, ,, ,,	8	1 0	1100 T	48·15	...
D Middlesboro' (Southfield Villas) .	W. Fallows, Esq.	5	1 0	21 T	29·25	153
D Saltburn (Skelton Reservoir) .	W. I'Anson, Esq., C.E.	8	1 0	325 ⅄	30·47	182
D†Mickleton [Middleton] .....[14]	G. J. Symons, Esq. F.R.S	8	1 0	775 T	47·35	205
† ,, (Lime Kiln Pasture)..	,, ,, ,, ...	8	1 0	1175 T	44·60	...
DIVISION X—NORTHERN COUNTIES.						
DURHAM.						
Darlington (Dinsdale Rectory)...	Rev. J. W. Smith	5	2 0	54 T	37·03	179
D† ,, (South End)	Mr. N. Black	8	0 10	140	35·71	211
D† ,, (Cleveland Parade)..	S. Hare, Esq.	5	1 0	160 T	34·72	207
D ,, (Brinkburn)	Mr. H. Waud	8	1 6	165 T	36·42	164
D Barnard Castle (Whorlton)	Miss Dodgson	5	0 11	424 T	32·20	...
D†Staindrop (Raby Castle)	Mr. R. Westcott	8	1 0	460 T	33·43	139
D Darlington (Heighington).....	Rev. C. C. Chevallier ..	5	4 0	460 T	37·91	201
D Hartlepool (Heugh Lighthouse)..	W. Belk, Esq., C.E. ...	5	0 6	34 ⅄	35·62	253
,, (Hurworth Burn) ...	T. Fenwick, Esq., C.E.	5	0 7	360	32·59	...
D ,, (Hart Reservoir).....	,, ,, ,, ...	8	0 9	164	27·43?	145
D†Wolsingham .....[23]	Mr. A. Mitchell	5	1 0	464 ⅄	41·73	231
D Durham Observatory.....	G. A. Goldney, Esq. ...	8	4 3	340 ⅄	33·43	194
D ,, (Ushaw College)	Rev. J. Corbishley.....	5	0 10	600 ß	37·89	211
D Seaham Harbour	G. W. H. Aird, Esq....	8	1 9	60 ⅄	30·49	192
,, Vicarage	Rev. A. Bethune	5	0 4	80 T	31·34	111
D ,, Hall	Mr. R. Draper	5	1 0	100 ⅄	32·39	127
Knitsley (Shotley Bridge).....	Mr. J. Coulson	5	0 6	345 T	31·80	...
D Chester-le-Street (Birtley)	R. C. Clephan, Esq. ...	5	1 0	205 ⅄	30·03	210
D Sunderland (W. Hendon House)	T. W. Backhouse, Esq.	5	1 0	132 ⅄	29·96	...
,, (,, ,,)	,, ,, ,, ...	5	1 0	132 ⅄	30·32	...
NORTHUMBERLAND.						
†Allenheads .....[22]	Mr. J. Charlton.....	8	0 4	1353 ⅄	48·69	...
D Haltwhistle (Shaft Hill)	Mr. R. Hetherington...	5	0 8	626 T	46·50	184
Bywell.....	Mr. W. J. Tone.....	8	0 6	87 T	31·03	...
D Haltwhistle (Unthank Hall) ...	Rev. Dixon Brown.....	5	0 9	380 T	43·19	216
D Haydon Bridge (Ridley)	Rev. G. Reed	5	2 8	340 T	28·86	203
D Corbridge-on-Tyne(LauderGnge)	T. G. Hurst, Esq.	5	0 10	275 T	29·05	180
Wylam (Holeyn Hall)	Mr. T. Irving.....	5	1 0	...	26·44?	...
D Newcastle (Clifton Road).....	R. Foster, Esq.	8	1 6	314 ⅄	28·02	183
,, (Philos. Society)	W. Lyall, Esq.	8	1 7	105 T	28·60	...

Numbers printed thus [12] refer to the Map facing page 52 of *British Rainfall*, 1876.

DIVISION X.—NORTHERN COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground. ft.	in.	Height Above Sea level feet.	Depth of Rain. 1882 inches.	Days on which '01 or more fell
	NORTHUMBERLAND—(*con.*)							
	Newcastle (Portland Road)	Mr. T. Bone	4	9	6	...	30·14	191
	,, (Gladstone Terrace)	W. Smurthwaite, Esq.	2	6	0	150 T	29·55	193
D	,, (Town Moor)	Mr. W. Neill	5	0	6	201 ⅄	30·08	203
D	,, (Wellburn Jesmond)	W. H. Holmes, Esq.	5	1	0	161 T	31·84	193
D	Haydon Bridge	T. J. Bewick, Esq., C.E.	8	1	0	291 ⅄	32·66	207
	North Shields (Post Office)	The Meteor. Council	8	1	4	100	28·89	200
D†	,, (Rosella Place)	R. Spence, Esq.	8	1	6	124 ⅄	30·67	184
	,, (Low Lights)	J. R. Procter, Esq.	8	3	4	22 ⅄	30·38	183
D	,, (Tynemouth)	P. J. Messent, Esq., C.E.	5	2	8	65 ⅄	28·01	189
	,, (Clementhorpe)	J. R. Procter, Esq.	5	1	0	150 ⅄	29·52	182
D	,, (Whitley Convales. Ho.)	C. Roope, Esq.	5	0	6	38	30·01	139
D	,, (Monkseaton)	T. Green, Esq.	5	4	0	132 T	31·32	142
D	Newbrough	Rev. W. Watkins	5	1	1	244 ⅄	31·84	191
	Humshaugh	The late Rev. H. Taylor	8	1	6	286 T	29·88	...
	Stamfordham	Rev. J. F. Bigge	5	1	0	400 T	31·58	...
	Bingfield House	J. Coppin, Esq.	5	1	0	445 T	33·70	...
Newcastle and Gateshead W. Works	Whittle Dean	J. Mangham, Esq.	10	...		...	28·81	...
	Swinburn (Woodford)	,, ,, ,,	10	0	6	500 ⅄	30·20	...
	North Tyne (Green Crag)	,, ,, ,,	10	0	6	800 ⅄	33·70	...
	,, ,, Valley	,, ,, ,,	10	0	6	300	31·37	...
	Hallington	,, ,, ,,	10	0	6	469 ⅄	32·50	...
	,, (Fawcett)	,, ,, ,,	10	0	6	563 ⅄	29·76	...
	Gunnerton Burn (Camphill)	,, ,, ,,	10	0	6	676 ⅄	31·47	...
	Cramlington	The Meteor. Soc	...	1	1	256	31·24	213
D	Morpeth (Meldon Park)	Mr. J. Finlay	5	1	0	...	32·11	191
	,, (Bothalhaugh)	Hon. & Rev. W. C. Ellis	5	0	10	35 ?	30·61	191
D	,, (Earsdon)	T. J. Murday, Esq.	6	1	3	600	33·37	188
	Rothbury (Brenckburn Priory)	C. H. Cadogan, Esq.	8	1	0	300 T	36·14	165
D	,, (Whitton Tower)	Rev. Dr. Ainger	5	1	0	410 T	38·03	195
	,, (Cragside)	Sir W. G. Armstrong, CB	8	1	0	400 ⅄	38·63	158
D	Alwinton (Biddleston)	Mr. P. Dodds	5	1	0	820 T	36·43	195
	Alnwick (Bondgate)	J. Lingwood, Esq.	8	1	0	214 T	32·87	199
D	Howick Hall	Rt. Hon. Earl Grey, K.G.	8	0	10	121 ⅄	30·78	201
	Ilderton (Lilburn Tower)	E. J. Collingwood, Esq.	10	6	0	300 T	37·90	...
	Cheviot (Broadstruther)	G. P. Hughes, Esq.	8	4	0	1692 ⅄	55·13	...
D	Pawston [Coldstream]	B. P. Selby, Esq.	8	1	0	328 T	33·30	200
	*Wooler (Milfield)	G. A. Grey, Esq.	5	0	8	200 ⅄	27·99	...
	Belford (Middleton Hall)	J. T. Leather, Esq., C.E.	10	3	0	240 ⅄	27·98	...
	CUMBERLAND.							
	Ravenglass (The Grove)	J. Ross, Esq.	5	2	6	80 ⅄	49·11	172
	Braystones	J. D. Watson, Esq.	10	3	8	36 T	41·82	...
	Egremont (Calder Abbey)	Mr. J. Phizackerley	5	2	8	...	50·79	187
	Scawfell Pike ..... *monthly*	The late J. Maitland, Esq	8	0	6	3200 T	141·40	...
	,, ,,	,, ,, ,,	4	...		3200 T	111·28	...
	Sprinkling Tarn ,, ...(7)	,, ,, ,,	4	0	6	1985 T	150·31	...

NOTE.—The numbers marked thus (11) on this and the next page refer to the Map facing p. [144] of *British Rainfall*, 1877.

DIVISION X.—NORTHERN COUNTIES——(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above Ground in.	Height Above Sea Level feet.	Depth of Rain. 1882 inches.	Days on which '01 or more fell.
CUMBERLAND—(*con.*)							
Wastdale Head ... *monthly*	The late J. Maitland, Esq	4	0	6	204 T	91·56	...
Styehead Tarn ... ,, ...(8)	,, ,, ,, ...	4	0	6	1472 T	133·49	...
†The Stye ..... ,, ..(10)	,, ,, ,, ...	4	0	6	1077 T	202·50	...
,, ,, ...(10)	,, ,, ,, ...	8		...	1077 T	199·20	...
Gable Hawes ..... ,, ...	,, ,, ,, ...	4	0	6	1077 T	80·67?	...
St. Bees (Abbot's Court)	A. Hodgetts, Esq.	5	1	1	20 L	41·15	215
†Seathwaite ..... *monthly* (11)	Mr. Dixon	4	0	6	422 T	152·46	...
D† ,, ...(11)	,, ,, ...	5	1	0	422 T	149·69	254
,, ...(11)	The Meteor. Society ...	5	1	0	422 T	146·09	252
* ,, ...(11)	H. C. Marshall, Esq....	5	1	0	420 T	143·70	...
Ullscarf ..... *monthly* ...	J. F. Bateman, Esq. FRS	7	1	0	2100 T	137·20	...
Whitehaven (The Flosh, Cleator)	T. Ainsworth, Esq. ...	...	...		..	57·41	...
†Wythburn Vicarage .....(20)	Rev. Basil Lawson.....	5	1	0	574 T	115·92	191
†Helvellyn (Birkside) .....(21)	J. F. Bateman, Esq., FRS	7	1	0	1900 T	97·80	...
D†Wythburn	,, ,, ,, ...	7	1	0	580 T	103·50	...
†Watendlath.....(13)	G. J. Symons, Esq., FRS.	8	1	0	867 T	87·00	...
Armboth.....	J. F. Bateman, Esq., FRS	7	1	0	550 T	91·90	...
,, Fells (The Pewitts) ...	,, ,, ,, ...	7	1	0	1650 T	98·20	...
Helvellyn (Whiteside)	,, ,, ,, ...	7	1	0	2100 T	79·20	...
†Whitehaven (Irish Street)	Dr. I'Anson	5	1	1	21 ⅄	47·82	205
D†Keswick (Barrow House) ...(46)	S. Z. Langton, Esq. ...	8	0	6	282 ⅄	82·64	237
Loweswater (Godferhead).....	A. H. Smith, Esq.....	5	1	0	360 T	62·47	...
,, (Waterend)	Mrs. Jackson	5	1	0	432 T	56·21	215
†Ullswater (Hallsteads) .....(36)	A. Marshall, Esq.	10	4	0	490 T	63·50	...
D†Keswick (Deer Close).....(45)	H. C. Marshall, Esq...	7	1	9	300 T	67·17	235
D† ,, (Derwent Island)...(14)	,, ,, ,,	5	0	7	280 T	58·67	242
D† ,, (Post Office).....(16)	J. F. Crosthwaite, Esq.	8	6	4	270 T	69·67	194
†* ,, (,,) .....(16)	,, ,, ,,	5	1	0	265 T	67·27	197
D† ,, (Shu-le-crow)	Miss Mitchell	8	2	6	296 T	62·11	223
Whitehaven (Gilgarron Hall) ...	Mr. D. Galloway	5	4	9	470 T	54·34	223
D ,, (Distington).....	Baldwin Latham Esq CE	5	1	0	...	44·08	170
D Cockermouth (Whinfell Hall) ...	W. Robinson, Esq. ...	5	2	0	265 ⅄	57·07	244
D ,, (Brandlingill).....	Capt. F. R. Sewell.....	5	1	0	320 T	57·35	224
D†Bassenthwaite (Mirehouse)	H. A. Spedding, Esq...	5	0	6	310 T	52·95	223
D†Cockermouth (Higham)	T. A. Hoskins, Esq. ...	5	1	0	478 ⅄	50·26	236
D ,, (Broughton Grange)	G. S. Wilson, Esq. ...	5	1	6	209 ⅄	43·17	239
†Penrith (Fell Lane, Fir Bank)...	T. Lester, Esq.	5	1	0	575 T	35·93	198
D ,, (The Luham, Edenhall)..	G. Varty Smith, Esq...	5	1	1	270 T	33·18	197
D Blencowe School.....	T. Fawcett, Esq.	8	0	9	601 B	41·62	209
Maryport (Netherhall)	H. P. Senhouse, Esq...	8	0	6	27 ⅄	38·41	158
Aspatria (Brayton Hall)	Mr. J. Hammond	8	1	6	220	37·15	...
D ,, (Brookfield)	M. Lidbetter, Esq.....	5	0	9	124 ⅄	37·68	211
D Alston (Love Lady Shield)..[21]	T. W. Dickinson, Esq..	5	1	0	1145 ⅄	52·51	238
Carlisle (Wreay Vicarage)	Rev. T. Lees	5	2	0	310 T	35·90	245
D Silloth Rectory	Rev. F. Redford.....	8	2	0	28 ⅄	36·34	204
D†Carlisle (Cemetery).....	I. Cartmell, Esq.	8	4	0	114 ⅄	33·18	187
,, (St. James's Road)	T. G. Benn, Esq.	8	1	0	...	33·94	207

DIVISION X.—NORTHERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet	inches.	
CUMBERLAND—(*con.*)						
D†Carlisle (Scaleby Hall)	R. A. Allison, Esq. ...	5	1 0	112 ⅄	38·94	212
Stapleton (Westfield House)	T. H. Walker, Esq. ...	5	1 0	400	49·73	226
Kirkandrews-on-Esk Rectory ...	Rev. F. Taylor	5	0 6	100 ⅄	43·80	...
WESTMORELAND.						
Kirkby Lonsdale	Mr. W. Harrison	5	1 2	209	56·69	...
D ,, ,, (Casterton)	R. A. Clarke, Esq.....	8	1 0	305 ⅄	58·56	225
,, ,, (Biggins House)	Miss Tomlinson	12	3 6	400 T	59·26	...
,, ,, (Whelprigg) ...	Mrs. Gibson	5	2 0	475 ⅄	54·48	...
D Kendal (Kent Terrace)	R. J. Nelson, Esq.....	5	1 6	146 T	59·82	211
D ,, (Underfell)	F. Wilson, Esq..... ...	8	3 0	300 B	62·31	231
D ,, (Hawesmead)	G.Braithwaite,jun.Esq.	8	0 6	175 ⅄	59·32	248
Bowness (Matson's Grounds) ...	G. Healey, Esq.....	12	0 8	451 ⅄	73·46	240
D Windermere (The Wood)	Rev. G. Crewdson	8	3 2	322 ⅄	75·30	227
D Ambleside (Brathay Vic.) ...(56)	Rev. H. S. Callender...	5	1 0	150 ⅄	84·87	249
D Elterwater (Woodlands).....(50)	E. Tucker, junr., Esq..	5	0 9	244 ⅄	95·84	250
,, (Lingmoor)	,, ,, ,, ...	8	1 0	1485 B	109·79	...
D†Ambleside (Nook Cottage)...(51)	Mr. E. Hird	5	1 0	227 ⅄	84·26	244
† ,, (Lesketh Howe) (26)	F. M. T. Jones, Esq. ..	5	2 6	175 T	88·41	250
D†Grasmere (High Close) .....(22)	E. B. W. Balme, Esq...	8	0 9	553	87·46	240
†Tebay	Rev. E. Holme	5	3 6	666 B	59·06	209
D Ravenstonedale (Brownber)	J. Fothergill, Esq.....	5	3 0	826 T	46·40	204
D*†Kirkby Stephen .....[8]	T. Mason, Esq.	5	1 0	574 T	46·81	203
†Shap (Sleddale)	Mr. W. Hoggarth	5	1 0	1560 T	92·85	...
† ,, (Swindale)	,, ,, ...	5	1 0	1610 T	106·70	...
†Haweswater(Mardale Green)(40)	G. J. Symons,Esq.,FRS	5	1 0	780 T	111·00	...
† ,, (,, ,,)(40)	,, ,, ,, ...	8	1 0	780 T	102·50	...
,, (Mardale, Chapel Hill)	H. P. Holme, Esq.....	5	1 0	747 ⅄	109·83	...
†Shap (Tailbert Beck)	Mr. W. Hoggarth	5	1 0	900 T	85·20	...
D† ,, (Copy Hill)... .....(58)	,, ,, ,, ...	5	1 0	852 ⅄	62·83	229
†Haweswater (Measandbecks)(41)	G.J.Symons, Esq. F.R.S	8	1 0	861 ⅄	57·50	...
D†Patterdale Hall ....(33)	Mr. D. Taylor	7	1 3	490 T	100·47	222
† ,, (Greenside Mine) (32)	Mr. T. Taylor.....	7	1 6	1000 T	120·42	...
D†CrosbyRavensworth(Reagill)(54)	Mr. Wilkinson	8	0 6	890 T	46·19	168
D†Appleby	Dr. Armstrong	5	1 0	442 ⅄	37·87	219
Ullswater (SharrowBay)*mtly*(38)	A. Parkin, Esq.....	5	0 7	500 T	48·42	...
,, (,, ,,) ...(38)	,, ,, ,, ...	8	1 6	500 T	45·25	...
D Brougham Hall [Penrith] ...(53)	Mr. A. Lodge.....	5	5 5	470	35·01	206
D Milburn	Miss Robinson	5	1 0	644 T	36·06	179
†Hurth Syke [Alston].....[20]	G. J. Symons, Esq. FRS	8	1 0	2000 T	74·70	...

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

MONMOUTH.						
D Newport (Gold Tops)	T. Dyne Steel, Esq, C.E.	8	1 0	90 T	56·98	239
D Llanfrechfa Grange	F. J. Mitchell, Esq. ...	5	4 0	326 ⅄	57·22	215

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
MONMOUTH—(*con.*)						
Tredunnock	Rev. C. T. Salusbury...	5	2 0	170 ⅄	47·43	208
D Chepstow(The Mount)	H. A. Smith, Esq.....	5	1 1	150	48·85	211
D ,, (Piercefield Park)	H. Clay, Esq.....	5	1 6	300 ?	48·15	211
Pontypool (Llanthewy Vach Rec.)	Rev. J. E. J. Machen...	5	2 3	200 T	58·70	240
Newport (Llangibby Castle)	D. Lawrence, Esq.....	8	3 0	190 T	46·73	224
D Pontypool (Trevethin Vic.)	Rev. J. C. Llewellin ...	5	0 9	706 ⅄	65·68	229
Blaenavon (Gas Works)	C. White, Esq.	5	0 9	980 T	81·59	222
D Tredegar (Bedwellty House)	J. Colquhoun, Esq. ...	8	1 0	972 ⅄	79·97	253
D ,, (The Willows)	G. A. Brown, Esq.....	8	1 0	1024 T	74·57	233
D ,, (Ebbw Vale)	R. S. Jordan, Esq.....	5	1 0	1060 ⅄	76·01	182
D Abergavenny (Larchfield)	Dr. McCullough.....	5	1 0	240 B	46·82	212
D Llantilio Court	Sir H. M Jackson, Bt. MP	5	0 11	207 ⅄	44·77	193
D Monmouth (Pentwyn)	Rev. J. T. Harding ...	5	1 0	191 B	39·50	203
GLAMORGAN.						
* Cowbridge (The Ham)	G. W. Nicholl, Esq. ...	8	1 3	96 T	51·26	201
Porthkerry (Buttrill)	D. Davis Joseph, Esq...	5	1 0	255 T	50·13	177
Cardiff (Cogan Pill, Landough)..	J.A.B. Williams, Esq CE	5	0 9	110 ⅄	57·78	204
D ,, (East Moors)	T. Waring, Esq., C.E..	5	1 0	24	55·71	214
,, Cemetery	Mr. T. Haydyn	5	1 0	95 T	61·01	204
D ,, Castle	Mr. A. Pettigrew	5	1 3	38 ⅄	56·07	238
D ,, (Park Place)	W. Adams, Esq., C.E..	5	1 0	43 ⅄	56·60	226
Cowbridge (Ash Hall)	D. Owen, Esq.	8	1 0	315 ⅄	64·54	241
D Cardiff (Ely)	J.A.B. Williams, Esq CE	8	4 0	39 ⅄	56·73	210
D† ,, (Pentyrch)	F. G. Evans, Esq.....	5	1 1	100 T	68·66	243
,, (Lisvane)	J.A.B. Williams, Esq CE	5	1 1	136 ⅄	61·53	235
D Caerphilly (Aber-tri-dwr)	G.A. Lundie, Esq., C.E.	5	1 0	471 T	83·02	239
D Swansea (South Dock Lock)	R. Capper, Esq.....	12	14 9	40	55·23	218
Neath	H. S. Ludlow, Esq. ...	5	1 0	204 T	64·76	215
D ,, (Glyncorrwg)	D. Brown, Esq.	5	4 6	717	115·06	232
D Aberdare (Ty Draw Treherbert).	D. Davis Joseph, Esq...	5	1 0	735 T	128·93	230
,, (Mardy)	W. T. Lewis, Esq., C.E.	5	2 0	431 ⅄	86·51	180
D ,, (Abernant)	E. Jones, Esq.	5	1 0	425	74·75	200
D Ystalyfera (Tan-y-rallt)	D. H. Lewis, Esq.....	8	1 6	300 L	81·15	207
CARMARTHEN.						
Llanelly Water Works	G. Watkeys, Esq.	4	4 6	216 ⅄	52·91	220
Tegfynydd [Narberth]	H. S. Morgan, Esq. ...	5	1 0	158 ⅄	66·29	182
D†Carmarthen (Joint Co. Asylum)..	Dr. Hearder	8	1 0	189 ⅄	62·68	247
Llandilo (Golden Grove)	Rt. Hn. Viscount Emlyn	5	0 6	...	64·77	241
,, (Dynevor Castle)	Rt. Hon. Lord Dynevor	8	1 0	236 T	61·08	243
D Llandovery	J. Watkins, Esq.	5	1 0	217 T	65·64	253
PEMBROKE.						
Pembroke (Stackpole Court)	Rt. Hon. Earl of Cawdor	5	1 0	60 T	56·76	218
,, (St. Ann's Head)	The Meteor. Council ...	8	0 8	150	46·90	242
D Narberth Rectory	Rev. W. Wilson	8	1 4	...	66·13	240
D*Haverfordwest (High Street)	E. P. Phillips, Esq. ...	5	1 0	95 T	63·39	202

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
PEMBROKE—(*con.*)						
D Narberth (Clynderwen)	,, ,, ,, ...	5	1 0	230	64·32	237
D Solva	E. Robinson, Esq.	5	1 0	90 B	43·21	224
D St. David's	Dr. W. P. Propert	5	1 0	189 B	48·60	216
D Rosebush	E. P. Phillips, Esq. ...	5	1 0	750	78·32	226
D Fishguard (Castle Hill)	W. D. Wathen, Esq.	5	1 0	200 B	60·23	201
D Llechryd (Castle Malgwyn)	Mr. H. Howard	5	1 0	...	61·16	236
CARDIGAN.						
D Aberystwith (Goginan) (58)	Capt. Paull	5	2 6	290	62·36	236
D† ,, (Gogerddan) (93)	Sir Pryse Pryse, Bart.	5	1 0	80 B	62·26	216
D ,, (Cwmsymlog)	Capt. Garland	5	4 0	800 ?	72·62	243
Waenbwll [Machynlleth]	Sir Pryse Pryse, Bt.	8	1 0	1400 B	100·00	...
BRECKNOCK.						
D Nanthir Reservoir [Aberdare]	T. L. Edwards, Esq.	5	1 0	860 T	79·36	...
,, ,, [,,]	,, ,, ,,	5	1 0	860 T	79·95	...
Brecknock (Cantreff Rect.)	Rev. J. J. Evans	5	0 8	...	64·73	...
D ,,	J. Kirk, Esq.	5	2 0	437 T	54·16	221
,, (Watton Mount)	Thelate G. Overton, Esq.	5	4 6	400 T	51·27	...
D ,, (Llandefaelog-fach Rect.)	Rev. W. Williams	5	1 1	637	55·79	262
Builth (Llanwrtyd Wells)	Mr. B. Jones	5	1 0	800	84·53	264
D ,, (Abergwessin Vic.)	Rev. J. Jones	5	1 0	1003 L	85·22	261
Newbridge (Llysdinam)	Mrs. Lister Venables	8	1 3	600 B	52·33	...
RADNOR.						
D Rhayader (Nantgwillt) (70)	R. L. Lloyd, Esq.	5	1 0	767 B	78·77	239
D*Presteign (Hereford Street)	Mr. W. White	5	1 9	550	43·87	224
MONTGOMERY.						
Llangurig (Esgair Clochfan)	G. J. Symons, Esq., FRS	5	1 2	1330	87·50	...
† ,, (Ystrad-olwyn-fawr) (59)	Mr. J. Jones	8	1 0	950	67·50	...
†Llanidloes (Dolenog) (69)	Thelate TF Roberts, Esq.	5	1 6	550	44·31	200
D Newtown (Dolfor) (92)	W. B. Pugh, Esq.	5	0 3	1027 T	50·56	230
D Churchstoke (Mellington Hall)	P. Wright, Esq.	5	1 6	540 T	37·52	205
,, (,, ,,)	,, ,, ,,	5	1 6	540 T	37·76	...
Dylife Lead Mine (55)	G. J. Symons, Esq., FRS	5	1 2	1400 T	96·70	...
D Newtown (Llanwnog)	Rev. Dr. Parry	5	3 5	...	49·61	225
Montgomery	Rev. F. W. Parker	5	1 0	550 T	35·53	...
D†Carno (Tybrith) (90)	Miss Marsh	5	1 0	595 T	66·73	234
D Welshpool (Buttington Vic.)	Rev. R. J. Roberts	5	1 0	300 T	41·27	256
Garthbibio (Bwlch Tomlyd)	G. J. Symons, Esq., FRS.	5	1 2	1370	108·05	...
† ,, (Lluest fawr) (49)	,, ,, ,,	8	1 0	990 T	76·10	...
D†Llanwddyn (Daffrn-newydd)	,, ,, ,,	8	1 0	750 B	59·42	165
FLINT						
† Mold (Bryn Alyn)	Rev. R. B. Cooke	5	1 2	483 T	39·74	...
† Flint (Soughton Hall, Northop)	J. Scott Bankes, Esq.	5	0 8	418	37·49	217

The numbers in arenthesis refer to the Map facing page 196 of *British Rainfall*, 1875.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
FLINT—*con.*)						
St. Asaph (Nantllys) .....(33)	P. P. Pennant, Esq. ...	5	1 0	173 ⅄	34·51	...
† Halkyn	Capt. Williams	5	1 3	895 ⅄	38·92	154
D Holywell (Bagillt).....	A. O. Walker, Esq. ...	5	1 0	20 T	34·79	202
D Rhyl (Sedgley House)	W. T. Girdlestone, Esq.	5	2 6	21 ⅄	30·05	197
Prestatyn (Nant).....(77)	T. G. Dixon, Esq.	5	1 2	30 ?	33·37	217
DENBIGH.						
Chirk (Cefn-y-wern).....	T. E. Tatton, Esq.....	5	1 0	415 T	40·56	232
Ruabon (Wynnstay).....	Mr. Middleton	12	3 0	484 T	38·34	247
Llangollen (Plas Berwyn).....	Major Tottenham	5	0 5	440	47·36	204
Wrexham (Pack Saddle Res.) ...	F. W. Storr, Esq.....	5	0 9	370 ⅄	36·88	225
,, (Cae Llwyd Res.) ...	,, ,, ,, ...	8	0 9	918 ⅄	50·13	213
,, (,, ,, ,,) ...	,, ,, ,, ...	5	...	...	49·47	213
† ,, (Brymbo)	C. E. Darby, Esq.....	6	6 9	632 ⅄	35·16	...
D Rosset (Trevalyn Hall).....	Capt. Griffith Boscawen.	5	1 0	58 ⅄	30·74	208
D Denbigh (Vale Street)	J. Lloyd Roberts, Esq..	5	1 0	230 ⅄	34·99	208
,, (Glan-y-wern).....	Col. Humberston.....	5	1 0	150 B	30·08	220
,, (Dyffryn Aled) .....(82)	P. W. Yorke, Esq.....	5	1 2	650 T	47·48	226
D Llangerniew (Hafodunos).....	Mr. J. McNair	5	2 10	515 T	48·95	142
D†Nannerch (Penbedw Hall)	Mr. W. McMurray ...	8	0 6	650 T	42·73	233
Eglwys-Fach (Bodnant)	A. Stewart, Esq.....	8	2 6	102 ⅄	39·94	203
Colwyn Bay (Nant-y-Glyn) ..	A. O. Walker, Esq. ...	5	2 0	180 ⅄	34·96	204
,, (Bryn Euryn)...(76)	Mr. T. Hutchings	5	1 0	125 T	34·82	210
MERIONETH.						
*†Dolgelly (National School)...(21)	Mr. Williams	5	1 6	43 T	74·95	232
,, (Hengwrt)	Mrs. Lloyd	5	0 6	90 B	80·55	246
† ,, (Brithdir).....(28)	J. Hill, Esq.	5	1 6	465 T	87·32	...
† ,, (,,) .....(28)	,, ,, ...	5	5 3	474 T	71·74	...
Trawsfynydd	Major Mathew	5	0 7	700	83·27	162
Bala (Henblas)	,, ,, ...	5	1 0	544	61·93	192
D Llanderfel (Palé Gardens)	Mr. T. Ruddy.....	8	1 0	606 ⅄	55·85	248
†Rhiwbryfdir	Major Mathew	5	10 0	1100	136·55	217
D Corwen (Rhug Gardens)	Mr. J. Bennett	5	1 0	500	44·52	188
CARNARVON.						
Pwllheli (Bodfaen) .....(17)	Major Mathew	5	1 0	80	52·54	204
*Llanystumdwy (Talarvor)...(16)	,, ,, ...	5	3 0	50	47·38	162
D†*Port Madoc .....(1)	,, ,, ...	5	3 0	10	65·63	209
*Llangybi (Cefn) .....(6)	,, ,, ...	5	1 0	200	58·03	207
Llandwrog (Glynllivan Park) ...	Hon. F. G. Wynn.....	5	0 8	60 ?	51·89	229
Pen-y-gwryd .....(85)	Mr. H. Owen	8	...	880	102·50	189
Carnarvon (Cocksidia) .....(39)	Major Mathew	5	1 1	120	41·11	224
Llanbedr-y-Cennin (Llyndulyn)	T. T. Marks, Esq., C.E.	8	1 6	1622 L	102·54	217
Llanfairfechan	R. Luck, Esq.	5	0 8	150 B	42·68	181
D†Llandudno (Warwick House)(29)	Dr. Nicol	8	0 8	99 ⅄	32·46	209

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above Sea Level feet.	Depth of Rain. 1882 in ches.	Days on which ·01 or more fell.
	ANGLESEA.							
D	Menaifron.....(23)	Late Rev W W Williams	5	1	0	14 T	41·06	244
D	Llangadwaladr (Bodorgan)	Mr. J. Ellam	8	4	0	...	40·99	224
D	Holyhead (Plas Rhos-colyn).....	Capt. E. H. Verney, R.N.	8	1	5	100 T	36·25	121
	,, ...	The Meteor. Council ...	8	1	2	44	39·98	232
	Llanerchymedd Llwydiarth Esgob	T. Prichard, Esq.	5	1	6	112 L	43·90	228
	Bodewryd (Rhosybol)	Rev. D. Morgan.....	5	1	6	170	41·67	188
	ISLE OF MAN.							
	Calf of Man (Chicken's Rock) ...	Bd. of Northern Lights	...	...		...	27·95	132
	Castletown (Langness)	,, ,, ,, ...	...	...		...	33·05	111
	Port Erin	A. W. Moore, Esq.....	...	...		...	33·27	177
D	Douglas (Derby Square)	P. Killey, Esq.	5	1	1	78	47·95	210
D	,, (Victoria Road)	H. Story, Esq.	8	1	0	120 L	50·05	241
	,, (Cronkbourne)	A. W. Moore, Esq. ...	8	0	10	138	51·61	227
	,, (Clypse, Onchan)	,, ,, ,, ...	...	...		...	52·16	222
	Kirkmichael (Druidale)	,, ,, ,, ...	...	...		...	61·33	242
	,, ...	,, ,, ,, ...	...	...		...	44·49	234
	Point of Ayre.....	Bd. of Northern Lights	...	...		...	27·55	160
	ISLES OF SCILLY.							
	St. Mary's	The Meteor. Council ...	8	1	6	77 L	40·49	247
	JERSEY.							
	St. Aubins (Noirmont)	The Meteor. Council ...	8	1	0	270	41·80	219
D	,, School	J. E. Vibert, Esq.....	8	1	0	140 B	41·41	206
	,, ,, ...	,, ,, ,, ...	8	18	4	155	34·63	...
	GUERNSEY.							
D	Guernsey (Les Ruettes Brayes).	A. Collenette, Esq. ...	5	1	0	255 L	47·81	236
	,, (,, ,, ,,).	,, ,, ,, ...	4	5	6	260 L	47·10	....
	,, (Villa Carey)	Dr. Carey	8	1	3	180	41·80	227
D	,, (Grange Road)	Mrs. Mansell	5	1	0	174 B	48·91	237

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
WIGTON.						
Mull of Galloway	Bd. of Northern Lights	...	...	...	29·02	115
D Garliestown (Galloway Ho.)	Mr. J. Day	5	4 6	...	45·73	165
D Stoneykirk (Ardwell House)	M. J. Stewart, Esq.	8	0 9	125	39·38	162
Corsewall	Bd. of Northern Lights	...	3 4	22 ?	39·52	160
KIRKCUDBRIGHT.						
Little Ross	Bd. of Northern Lights	...	3 3	130 ?	28·82	128
Auchencairn (Torr House)	W. Ovens, Esq.	5	0 8	30	50·03	...
Dalbeattie (Colvend Manse)	Rev. J. Fraser	5	1 3	120 T	42·50	...
Twynholm (Cally)	A. Buchan, Esq.	5	1 0	87	58·93	...
Kirkbean (Woodside Cottage)	Mr. J. Foulds	5	3 0	33 T	49·19	190
*Dalbeattie	R. W. Macnab, Esq.	5	0 8	30 ?	49·51	...
D Cargen [Dumfries]	P. Dudgeon, Esq.	5	0 4	80 ⅄	44·43	202
New Galloway (Glenlee)	Mr. W. Melville	...	...	...	60·91	...
Irongray (Drum Park)	D. J. Kay, Esq.	3	0 6	230	62·80	...
D*Carsphairn	J. Hannah, Esq.	5	3 10	574 T	72·29	184
DUMFRIES.						
D Dumfries (Crichton Inst.)	Mr. A. Bruce	8	0 6	159 T	42·64	210
Ecclefechan (Springkell)	Mr. J. Leslie	...	...	...	48·11	...
Canobie (Byreburnfoot)	W. Doughty, Esq.	3	0 9	160	41·88	...
Langholm (Westwater)	Mr. W. Elliot	5	2 0	550 T	66·35	...
,, (Ewes School)	J. C. Little, Esq.	3	0 6	455 T	63·20	...
,, (,, Burnfoot)	,, ,,	3	0 6	553 ⅄	65·00	...
D Thornhill (Capenock)	Mr. T. Bayne	5	1 0	300	52·01	153
Durrisdeer (Drumlanrig Castle)	A. Buchan, Esq.	3	0 6	191	52·90	...
,, (Tudhope)	J. C. Little, Esq.	3	0 6	1961 ⅄	89·75	...
Moffat (Ericstane)	J. J. Welsh, Esq.	...	...	550	65·45	...
ROXBURGH.						
New Castleton (The Flatt)	J. Elliot, Esq.	3	0 9	350 T	49·60	...
,, ,, (Kirndean)	Miss Elliot	3	0 9	400 T	55·70	...
D Teviothead Manse	Rev. R. Young	3	0 9	550 T	59·65	230
Hawick (Wolfelee)	Sir W. Elliot, Bt., F.R.S.	5	0 6	601 T	45·56	...
,, (Branxholme)	W. E. Lockhart, Esq.	5	0 2	451 ⅄	41·31	...
,, (Kirkton)	Mr. J. Welsh	3	0 6	759 ⅄	36·50	...

DIVISION XII.—SOUTHERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above Ground in.	Height Above Sea Level feet.	Depth of Rain. 1882 inches.	Days on which .01 or more fell
ROXBURGH—(*con.*)							
D*Hawick (Silverbut Hall)	Mr. D. Elder	5	4	6	512 T	35·18	201
*Jedburgh (Sunnyside)	G. Hilson, Jun., Esq.	5	6	0	351 T	28·70	144
D St. Boswell's (Elliston)	The Hon. G. Dalrymple	5	0	9	350 B	35·07	203
D Kelso (Springwood Park)	Mr. P. Reid	10	1	0	130 L	29·27	193
D Melrose (Asylum)	Dr. Grierson	5	0	6	480 T	32·03	241
D ,, (Abbey Gate)	Mr. A. Dodds	5	0	6	280 T	40·47	257
D Wooplaw [Galashiels]	J. Murray, Esq.	5	1	0	880 T	35·52	235

DIVISION XIII.—SOUTH-EASTERN COUNTIES.

SELKIRK.							
Borthwickbrae [Hawick]	W. E. Lockhart, Esq.	8	0	2	800	47·40	...
Selkirk (Bowhill)	Mr. J. Mathison	9	11	0	537	39·25	189
Galashiels (Abbotsford Rd.)	Dr. Somerville	5	0	8	416 T	38·77	231
PEEBLES.							
Glenrath (Manor)	Mr. S. Linton	5	1	2	764 T	44·87	...
Peebles (Stobo Castle)	A. Buchan, Esq.	...	...		...	35·40?	...
Eddlestone (Portmore)	W. H. Cameron, Esq.	11	0	6	1000	40·71	217
D N. Esk Reservoir [Penicuick]	Mr. J. Garnock	11	0	6	1150 T	46·55	204
BERWICK.							
D Coldstream (The Hirsel)	Mr. Cairns	3	0	7	90	29·17	185
,, (Milne Garden)	A. Buchan, Esq.	...	...		...	26·50	...
D Marchmont House	Mr. P. Loney	5	1	0	500 T	39·57	224
Dunse (Clouds)	C. Watson, Esq.	8	0	6	500 T	41·05	200
St. Abb's Head	Bd. of Northern Lights	...	...		...	24·58	151
HADDINGTON.							
D Haddington (Asylum)	J. Mowat, Esq.	5	1	0	240 T	31·10	228
D East Linton	Mr. J. Storie	3	0	3	90 T	28·12	152
Prestonkirk (Smeaton)	A. Buchan, Esq.	...	...		...	27·95	...
Drem (Craigielaw)	,, ,,	5	...		...	31·47	...
EDINBURGH.							
Moorfoot Hills (Bowbate)	W. H. Cameron, Esq.	...	...		...	54·80	...
,, ,, (Gladhouse)	,, ,, ,,	11	0	6	900	36·59	216
Pentland Hills (Crosswood)	,, ,, ,,	11	0	6	950	47·30	...
Penicuik (Edgelaw)	,, ,, ,,	11	0	6	654	32·00	174
Pentland Hills (Harper Rig)	,, ,, ,,	11	0	6	900	38·30	...
,, ,, (Harehill)	,, ,, ,,	11	0	6	1470	61·40	...
West Calder (Addiewell)	J. Fyfe, Esq.	...	...		...	43·77	...
Rosewell Asylum	A. Buchan, Esq.	5	0	6	695	33·34	...
Pentland Hills (Swanston)	W. H. Cameron, Esq.	11	0	6	550	33·55	...
,, ,, (Glencorse)	,, ,, ,,	11	0	6	787	41·58	177
,, ,, (Harlaw)	,, ,, ,,	11	0	6	800	40·60	...

DIVISION XIII.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
EDINBURGH—(*con.*)						
Pentland Hills (Clubbiedean) . .	W. H. Cameron, Esq...	11	0 6	750	38·61	156
,, ,, (Harbour Hill)...	,, ,, ,, ...	11	0 6	1112	45·55	...
†Dalkeith	A. Buchan, Esq...	4	0 4	183	27·70	...
Colinton (Fernielaw).....	J. Leslie, Esq., C.E. ...	11	0 6	500	40·00	...
D Gilmerton Station	Mr. J. J. Bell	5	0 6	240	32·41	197
Liberton (Alnwick Hill)	W. H. Cameron, Esq...	...	...	400	35·02	148
D Inveresk	Mr. McAuslane	9	2 0	30 T	34·27	173
Edinburgh (Charlotte Square)...	J. Leslie, Esq., C.E. ...	11	0 6	230	30·23	...
,, (,, ,,)...	,, ,, ...	12	63 0	300	22·12	...
,, (Cumin Place)	A. Buchan, Esq.....	5	1 0	274	32·86	...
,, (Streatham Ho.).....	,, ,, ...	...	...	...	32·85	...
Leith	The Meteor. Council ...	8	1 8	22	29·55	222
LINLITHGOW.						
Bathgate.....	J. Fyfe, Esq.	...	...	...	41·69	...

DIVISION XIV.—SOUTH-WESTERN COUNTIES.

LANARK.						
Biggar (Wiston)	Mr. W. Core	3	0 8	860 T	49·30	...
D Douglas (Newmains).....	Mr. J. Russell.....	3	0 4	783 ⅄	51·09	230
D Biggar (Cambus Wallace)	Captain Paul	6	0 6	748 ⅄	37·20	211
D Lanark (Ridge Park)	C. Lindsay, Esq.....	5	0 4	634 ⅄	38·39	206
Dalzell House	J G C Hamilton, Esq, M P	6	5 3	89 T	32·57	170
D Hamilton Water Works	Mr. R. Watson	7	0 9	432 T	41·85	...
,, (Bothwell Castle)	Mr. A. Turnbull	10	18 0	146 T	34·36	184
†Cambuslang (Bushy Hill).....	Dr. Muirhead.....	5	1 0	146 ⅄	39·26	230
D Coatbridge (Lochwood).....	E. Gibb, Esq.....	7	0 4	290 B	42·90	...
D Airdrie (Hillend Reservoir)	Mr. W. Ritchie	6	4 6	620 ⅄	47·30	146
Glasgow (Observatory)	Prof. Grant, F.R.S. ...	5	0 1	180 ⅄	44·37	...
,, (,,)	The Meteor. Council ...	...	...	...	43·60	223
,, ...	A. Buchan, Esq.....	...	...	...	38·96	...
AYR.						
Ballantrae (Glendrishaig).....	P. Murdoch, Esq.	5	1 0	450	41·13	...
D Girvan (Pinmore)	Hugh Hamilton, Esq...	5	0 9	187 ⅄	53·55	236
D ,, (Almont)	R. Aitken, Esq.....	6	0 9	150 T	52·31	211
,, (Turnberry)	Bd. of Northern Lights	...	...	...	35·69	192
DAyr (Cassillis).....	Miss Anstruther.....	5	1 0	220	44·91	220
,, (Auchinlee)	J. Drennan, Esq.	6	4 0	36 T	41·04	...
D Old Cumnock.....	Mr. J. Ballantine	5	1 3	380 ⅄	45·40	219
Kilmarnock (North Craig)	J. M. Gale, Esq., C.E..	12	0 6	310	46·52	...
Ardrossan	The Meteor. Council ...	8	1 0	10	42·62	241
,, (Kirkhall)	H. F. Weir, Esq.	...	...	105	45·87	167
D Dalry (Carsehead).....	A. B. Aitken, Esq. ...	5	1 1	160 T	57·10	233
Wemyss Bay (Kelly Gardens)...	Mr. G. Machray.....	...	...	...	58·30	...
Shaws W. Works (Kelly Dam)...	J. Wilson, Esq., C.E...	6	1 0	640?	76·80	...

DIVISION XIV.—SOUTH-WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	RENFREW.						
	Castle Semple Gardens	Mr. W. Thorburn	7	30 0	...	52·88	...
Gorbals's Dist.	Ryat Lynn	J. M. Gale, Esq., C.E..	8	0 5	310	55·35	...
Gorbals's Dist.	Waulk Glen	,, ,, ,,	12	0 5	280	50·05	...
Gorbals's Dist.	Middleton	,, ,, ,,	12	0 5	550	51·60	...
Gorbals's Dist.	Nither Cairn.....	,, ,, ,,	...	...	700	65·25	...
	,, ,, Stanely	R. Sharp, Esq.....	12	1 0	190	49·52	...
Paisley W. Works	Back Thornlymuir	,, ,, ...	12	1 0	646	60·43	...
Paisley W. Works	Muirhead	,, ,, ...	12	1 0	482 ⅄	62·09	...
Paisley W. Works	Springside	,, ,, ...	12	1 0	532	66·73	...
D	Glasgow (Queen's Park)	Mr. D. McLellan	8	0 9	144 ⅄	41·35	188
	Paisley (Ferguslie House)	Mr. J. Bryce	3	1 0	86 ⅄	45·02	189
	Shaws W. Wks (Green Water) ...	J. Wilson, Esq., C.E...	6	1 0	788 ⅄	75·70	...
	,, ,, (Garvocks)	,, ,, ,, ...	6	1 0	631 ⅄	73·40	. .
	,, ,, (Glenbrae)	,, ,, ,, ...	6	0 9	574 ⅄	70·00	...
	,, ,, (Mansfield).....	,, ,, ,, ...	5	1 0	573 ⅄	75·93	268
	,, ,, (Compensation Res)	,, ,, ,, ...	6	1 0	600	74·10	...
	,, ,, (Loch Thom)	,, ,, ,, ...	5	1 0	643	81·27	275
	,, ,, (Shielhill)	,, ,, ,, ...	6	0 9	962 ⅄	73·70	...
	,, ,, (Darndaff Moor)...	,, ,, ,, ...	6	1 0	840 ?	71·90	...
	,, ,, (Spango Burn) ...	,, ,, ,, ...	6	0 9	757 ⅄	67·10	...
D	,, ,, (Hole Glen).....	,, ,, ,, ...	5	1 0	603	73·03	251
	,, ,, (Prospect Hill) ...	,, ,, ,, ...	5	1 0	200	67·89	241

DIVISION XV.—WEST MIDLAND COUNTIES.

	DUMBARTON.						
	New Kilpatrick (Chesters)	J. Kennedy, Esq.	6	0 6	240 ⊺	50·20	...
	Helensburgh (Lyleston)	Forrest Frew, Esq.....	...	...	...	52·90	...
	Alexandria (Auchendennan) ...	A. Scott, Esq.....	6	0 9	...	61·10	...
	Helensburgh Water Works).....	Mr. T. Murray	6	0 3	296 ⅄	61·33	255
	Balloch Castle	A. J. D. Brown, Esq...	7	0 4	90 ⅄	61·11	241
	Arrochar.....	Rev. J. Dewar	5	0 9	10	94·27	...
	STIRLING.						
	Strathblane (Mugdock Reservoir)	J. M. Gale, Esq., C.E..	8	0 6	320	52·30	...
	Falkirk (Kerse)	A. Brown, Esq.	8	1 0	...	34·50	...
D	Killearn (Old Ballikinrain)	Mr. J. Smith	5	0 6	265	58·48	225
	Stirling (Polmaise Gardens).....	Mr. W. W. Ritchie ...	6	1 3	12	44·90	...
	Ben Lomond	J. M. Gale, Esq, C.E...	...	...	1800	101·30	...
	BUTE.						
	Arran (Pladda)	Bd. of Northern Lights	...	3 3	55 ?	47·23	168
	Holy Island (Lamlash)	,, ,, ,,	...	...	...	37·90	139
	Rothesay (Mount Stuart)	J. Kay, Esq.	3	2 6	100 ⊺	56·50	...
D	,, (Barone Cottage)	,, ,, ...	5	1 0	116 ⅄	59·59	247

DIVISION XV.—WEST MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
ARGYLL—(MAINLAND.)						
D Lochgilphead (Kilmory) *Snowdon*	Sir J. Campbell Orde, Bt.	5	...	...	72·38	242
,, (,,)	,, ,, ,, ...	5	0 4	92	71·69	...
,, (Poltalloch)	Mr. J. Russell	3	4 6	65	61·00	225
,, (Ederline)	Mr. D. McLeod	5	1 0	130	70·71	226
Inverary Castle	Mr. G. Taylor	6	0 6	28 T	79·10	...
D Dalmally	Sir J. B. Lawes, Bt., FRS	5	1 0	200 ?	85·34	246
Oban (Dunollie Castle)	A. Buchan, Esq.	5	1 2	55	73·04	...
Appin (Aird's)	R. Macfie, Esq.	5	0 11	41 ⅄	69·82	...
D Strontian (Laudale)	A. Fletcher, Esq.	8	1 0	15 ⅄	89·64	262
D ,, ,,	,, ,, ,, ...	5	1 0	15 ⅄	92·67	262
Ardnamurchan	Bd. of Northern Lights	...	3 6	82 ?	56·88	207
D ,, (Achateny)	Mr. R. Coltart	5	0 2	61 T	74·15	255
Loch Eil (Corran)	Bd. of Northern Lights	...	0 4	14 ?	90·27	219
,, ,, (Conaglen)	Rt Hn Countss of Morton	5	0 10	36 T	100·55	233
ARGYLL—(INSULAR.)						
Cantire, Mull of	Bd. of Northern Lights	...	...	279 ?	38·95	205
,, (Campbeltown, Devaar)	,, ,,	...	3 4	75 ?	54·53	195
,, (Skipness Castle)	Mr. P. Maclean	6	1 6	20 L	54·50	...
D ,, (Stonefield, Tarbert)	Colin G. Campbell, Esq.	5	0 10	90	82·23	254
D Islay (Ardbeg)	Mr. C. Hay	5	1 0	7 ?	56·55	223
,, (Rhinns)	Bd. of Northern Lights	...	3 0	74 ?	38·96	175
,, (Lochindaul)	,, ,,	...	...	...	51·61	184
,, (McArthurshead)	,, ,,	...	...	...	65·79	160
D* ,, (Eallabus)	J. S. B. Ballingall, Esq.	5	1 0	67 T	55·99	229
D ,, (Gruinart School House)	Mr. D. Mac Gilp	5	1 0	214 ⅄	49·60	215
,, (Rhuvaal)	Bd. of Northern Lights	...	...	...	39·83	161
Jura (Bay of Small Isles)	H. Evans, Esq.	...	...	...	74·50	...
,, (Lowlandmansbay)	Bd. of Northern Lights	...	...	...	55·16	175
,, (Fladda)	,, ,,	...	...	...	58·39	195
Lismore (Mousedale)	,, ,,	...	3 4	37 ?	60·28	170
Mull (Earraid)	,, ,,	...	...	...	41·60	152
,, (Calgary)	J. M. McKenzie, Esq.	5	1 6	120	57·36	...
D ,, (Quinish)	J. N. Forsyth, Esq.	5	0 9	35	67·58	258
,, Sound of	Bd. of Northern Lights	...	...	...	99·90	167
Tyree (Hynish)	,, ,,	...	...	...	63·68	216

DIVISION XVI.—EAST MIDLAND COUNTIES.

CLACKMANNAN.						
Dollar	Mr. A. Blackwood	9	1 0	178	57·92	...
KINROSS.						
D Loch Leven Sluice	Mr. W. Clark	7	0 7	365 L	43·00	162
Kinross (Turfhills)	G. Henderson, Esq.	5	0 6	400 ⅄	45·23	204

DIVISION XVI.—EAST MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
FIFE.						
ʙ Dunfermline (Keavil)	L. Dalgleish, Esq.	5	0 2	150	30·70	171
,, (Craigluscar)	W. Chisholm, Esq.	10	0 10	460 ⇈	43·06	...
D ,, (Outh)	L. Dalgleish, Esq.	5	0 2	890	49·36	217
Isle of May	Bd. of Northern Lights	...	...	...	26·23	...
Kilconquhar (Balcarres)	Mr. E. Tate	5	1 0	300	41·25	203
Falkland (Lothrie Reservoir)	A. Buchan, Esq.	5	0 1	700	47·13	...
D Strathmiglo (Leden Urquhart)	J. Thom, Esq.	8	0 6	615 ↾	41·02	213
Auchtermuchty	Dr. Troup	5	1 0	179 ⇈	37·29	189
Cupar	A. Buchan, Esq.	...	...	...	29·85	...
,, (Birkhill)	,, ,, ,,	5	0 5	130	34·29	...
St. Andrews (Priory)	Major Jackson	...	...	...	31·60	...
D ,, ,, (Newton Bank)	J. Dundas, Esq.	5	1 0	142 ⇈	37·64	214
Leuchars (Cuplahills, Ballmullo)	A. Buchan, Esq.	5	...	...	33·09	...
Kilmany (Mountquhanie House)	D. Gillespie, Esq.	3	1 3	240	34·80	...
PERTH.						
D Culross (West Grange)	J. J. Dalgleish, Esq.	5	0 2	116 ⇈	51·42	131
Menteith (Cardross)	H. D. Erskine, Esq.	8	0 10	120	50·40	...
Aberfoyle	J. M. Gale, Esq., C.E.	8	0 6	60	71·90	...
Dunblane (Kippenross)	P. Stirling, Esq.	6	0 4	150	38·50	...
Loch Dhu	J. M. Gale, Esq., C.E.	8	0 6	325	97·60	...
Ledard	,, ,, ,,	...	...	1500	79·70	...
Loch Drunkie	,, ,, ,,	8	0 6	420	83·40	...
,, Vennachar	,, ,, ,,	8	0 6	275	76·50	...
D Lanrick Castle	Mr. J. Begg	3	0 9	...	55·60	187
Bridge of Turk	J. M. Gale, Esq., C.E.	8	0 6	270	86·80	...
Loch Katrine (Tunnel Hill Top)	,, ,, ,,	8	0 6	830	94·60	...
Between Glen Finlas & Bed Ledi.	,, ,, ,,	8	0 6	1800	65·90	...
Auchterarder (Glensherup)	W. Chisholm, Esq.	11	0 11	900 ⇈	75·81	...
Glen Gyle	J. M. Gale, Esq., C.E.	...	...	380	104·60	...
Muthill (Orchil)	A. Buchan, Esq.	...	...	...	51·40	...
D Auchterarder (Colquhalzie)	Mr. R. Morton	8	0 5	150	41·62	149
D Balquhidder (Stronvar)	J. Dickson, Esq.	5	1 0	422 ↾	89·81	261
Lochearnhead	A. Buchan, Esq.	...	...	...	70·55	...
Crieff (Ochtertyre)	,, ,, ,,	3	0 9	325	49·35	...
Coupar Angus Station	Mr. J. Robertson	5	1 3	183 ↾	34·32	200
D Dunkeld (Inver Braan)	Rev. J. M. B. Murdoch	...	1 0	500 ?	46·11	219
Meigle (Arthurstone House)	P. Carmichael, Esq.	5	2 3	187 ⇈	34·67	...
,, (,, Garden)	,, ,,	5	2 3	196 ⇈	35·90	...
Aberfeldy (H.R.S.)	The Station Agent	5	1 0	...	36·20	181
D Dalnaspidal (H.R.S.)	,, ,,	5	1 6	1450	70·39	249
FORFAR.						
D† Dundee (Eastern Necropolis)	Mr. W. R. McKelvie	3	0 5	167 ↾	34·10	167
D Broughty Ferry (Douglas Ho.)	Mr. K. Graham	5	5 6	60 ⇈	36·65	197
D† Craigton (*daily*)	J. Watson, Esq., C.E.	8	1 0	481	49·04	199
† ,, (*monthly*)	,, ,, ,,	11	0 3	481	48·60	...
†Crombie Reservoir (,,)	,, ,, ,,	11	0 3	522 ↾	49·56	...

DIVISION XVI.—EAST MIDLAND COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
FORFAR—(*con.*)						
†Hill Head .....*monthly*	J. Watson, Esq., C.E..	11	0 3	570 T	49·18	...
D Arbroath.....	A. Brown, Esq., LL.D.	8	2 0	60 T	30·27	163
D Kirriemuir (Lintrathen)	J. Watson, Esq., C.E.	8	1 0	700	44·29	210
,, (,,) *monthly*	,, ,, ,,	8	1 0	700	45·40	...
,, (,, Creich Hill)	,, ,, ,,	8	1 0	1500	41·50	...
Montroseness	Bd. of Northern Lights	...	...	...	28·80	...
Montrose (Sunnyside Asylum)...	A. Buchan, Esq.	5	0 5	200	35·68	...
DIVISION XVII.—NORTH-EASTERN COUNTIES.						
KINCARDINE.						
The Burn [Brechin]	Col. McInroy	4	0 6	250	43·25	...
Fettercairn.....	A. C. Cameron, Esq....	4	0 3	230 ⅄	44·51	193
Girdleness	Bd. of Northern Lights	...	4 7	86	23·64	...
ABERDEEN.						
D†Braemar	J. Aitken, Esq.	8	0 9	1114 T	40·67	241
D†Aboyne (Glen-tanar).....	W.C.Brooks, Esq.,M.P.	5	1 0	576 ⅄	41·92	179
,, Castle	Mr. G. H. Smythe.....	5	1 3	450 T	35·64	236
Drumoak (Drum Castle) *monthly*	Mr. G. Gammie	5	1 6	275 ⅄	41·12	...
Cromar (Logie Coldstone Manse).	Rev. G. Davidson	5	1 0	694 ⅄	33·67	212
,, (,, ,, Loanhead)	Mr. A. Farquharson ...	5	1 0	743 ⅄	33·34	215
,, (Tillypronie).....	Mr. R. Littlejohn	5	1 0	1120 ⅄	34·81	197
†Aberdeen (Rose Street).....	A. Cruickshank, Esq...	5	0 5	95 T	32·20	...
D ,, ...	Mr. J. McCormack ...	8	1 9	103	35·28	224
,, (King's College)	The Meteor. Council ...	...	...	...	35·71	214
,, (Gordon's Hospital) ...	A. Buchan, Esq.	8	1 6	63 T	36·44	...
D Midmar (Blackstock)	Mr. J. Barron.....	5	0 8	570 T	37·08	179
D ,, (Dunecht Observatory)..	Rt. Hon. Earl Crawford	8	0 11	461 ⅄	32·14	207
D Skene (Kinmundy)	Miss E. Johnston	5	0 11	590 ⅄	32·26	218
Inverury (Manar Farm)	Mr. J. Walker	8	15 0	270 ?	34·05	...
Ellon (Tillydesk)	W. Hay, Esq.....	11	0 4	349 ⅄	32·52	...
New Deer (Artamford Cottage)..	J. Joiner, Esq.....	5	1 0	551 ⅄	40·11	226
D Old Deer.....	J. Walker, Esq.....	5	2 0	135 ⅄	36·19	236
,, ,, Manse	Rev. J. Peter	4	0 6	146 ⅄	33·59	...
D New Pitsligo	Mr. D. Sturrock.....	3	0 3	505	40·51	206
Kinnairdhead.....	Bd. of Northern Lights.	...	...	...	33·56	140
BANFF.						
D Keith (H.R.S.)	The Station Agent.....	5	1 0	364 T	36·08	186
ELGIN OR MORAY.						
Grantown	Mr. W. Duncan.....	5	1 1	712 ⅄	34·33	211
Craigellachie (Elchies)	Mr. J. Milne	8	1 6	560 T	34·50	171
D Forres (H.R.S.).....	The Station Agent.....	5	1 0	20	31·14	188
Gordon Castle.....	Mr. Webster	8	1 3	107	33·91	...
D Elgin (Highfield)	A. Cameron, Esq.	5	0 11	80 T	32·48	194

DIVISION XVII.—NORTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
ELGIN OR MORAY—(*con.*)						
D Burghead (H.R.S.)	The Station Agent	5	1 1	18	31·67	211
Covesea Skerries	Bd. of Northern Lights	...	...	...	?17·46	...
NAIRN.						
D Nairn (Acharéidh)	A. Clarke, Esq.	8	1 0	60 T	30·19	202
,,	The Meteor. Council	8	1 9	84	32·15	210

DIVISION XVIII.—NORTH-WESTERN COUNTIES.

WEST ROSS.‡							
D*Loch Alsh (Inverinate House)	Mr. McDonald	5	3 0	150	87·73	141
Strome Ferry (H.R.S.)	The Station Agent	5	1 0	40 T	68·77	266
Applecross Gardens	Mr. D. McCowan	5	1 0	70 ⅄	55·20	...
Strathconan [Beauly]	Mr. D. McIver	5	1 0	450	58·93	220
Auchnasheen, (H.R.S.)	The Station Agent	5	0 [illegible]	490	48·88	262
Loch Vraon	J. D. Baldry, Esq., C.E.	8	0 [illegible]	750	52·00	...
Lochbroom (Loch Drome)	,, ,, ,,	8	0 7	850	52·29	...
Braemore House	,, ,, ,,	8	0 7	750	54·53	...
,, Lodge	,, ,, ,,	8	0 7	100	57·27	...
D Lochbroom	Mr. M. Macleay	5	0 6	48	57·23	247
Isle of Lewis (Stornoway)	Bd. of Northern Lights	...	3 4	31 ?	34·13	186
,, (,,)	The Meteor. Council	8	3 0	24	45·33	271
,, (Butt of Lewis)	Bd. of Northern Lights	...	3 6	...	40·42	214
EAST ROSS.							
Achonachie Lodge [Beauly]	W. C. Preston, Esq.	5	1 0	125 B	39·38	255
Cromarty	Bd. of Northern Lights	...	3 4	28 ?	25·84	123
*Invergordon Castle	B. B. Æ. McLeod, Esq.	5	1 0	25 ?	32·50	173
D Alness (Ardross Castle)	Mr. R. Massie	5	1 0	450 ⅄	46·87	200
D Edderton	W. E. Cattley, Esq.	5	3 6	100 ?	39·12	212
Tarbetness	Bd. of Northern Lights	...	3 4	61 ?	23·90	...
Tain (Springfield)	Mr. E. McLardy	5	3 6	80	31·51	177
WEST INVERNESS.							
D Fort William (Public School)	C. Livingstone, Esq.	5	1 0	36 ⅄	89·55	258
Moidart (Roshven)	Prof. Blackburn	5	1 0	80 T	75·07	265
D Loch Shiel (Glenaladale)	Major Macdonald	5	1 2	50 ?	115·61	268
Glenquoich	A. Buchan, Esq.	8	2 0	660	116·41	...
Isle of Skye (Oronsay)	Bd. of Northern Lights	...	0 6	15 ?	54·44	181
D ,, (Broadford)	Mr. Logan	5	1 0	45	76·26	174
,, (Kyle Akin)	Bd. of Northern Lights	...	0 2	3 ?	70·36	190
,, (Sligachan)	Mr. Butters	5	1 0	40 T	125·98	...
,, (,,) *monthly*	,, ,, ,,	5	1 0	40	123·43	...
,, (Dunvegan)	Mr. D. Macaskill	5	1 0	24	75·90	229

‡ Including Cromarty.

DIVISION XVIII.—NORTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1882	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
WEST INVERNESS—(*con.*)						
Rona	Bd. of Northern Lights	...	...	...	69·80	208
Barrahead	,, ,, ,,	...	3 0	640 ?	34·32	104
S. Uist (Ushenish)	,, ,, ,,	...	0 4	157 ?	60·80	187
N. Uist (Monach)	,, ,, ,,	...	...	...	53·70	207
Harris (Island Glass)	,, ,, ,,	...	3 4	50 ?	45·51	182
EAST INVERNESS.						
D Aviemore (H.R.S.)	The Station Agent	5	1 0	710	34·88	...
Strath Errick (Farraline)	Capt. Fraser	3	1 3	700	34·90	...
Glen Strathfarrer ..... (*monthly*)	Mr. D. Fraser	5	1 0	461 T	70·44	...
Inverness (High School)	T. W. Wallace, Esq.	...	...	114	33·21	...
D ,, (H.R.S.)	The Station Agent	5	1 8	...	31·64	176
† ,, (Culloden House)	D. Forbes, Esq.	6	4 0	104 T	29·91	...
D Cawdor [Nairn]	J. Joss, Esq.	5	1 0	260	35·39	219

DIVISION XIX.—NORTHERN COUNTIES.

SUTHERLAND.						
Invershin	Mr. G. G. Young	5	4 0	20 T	37·24	...
D Golspie (H.R.S.)	The Station Agent	5	0 9	27	39·96	132
D ,, (Dunrobin Castle)	Mr. D. Melville	5	1 0	14 ⅄	39·11	197
,, (,, ,,) *monthly*	,, ,,	3	0 3	13 ⅄	39·35	...
Lairg	A. Buchan, Esq.	3	3 4	451	44·48	...
Assynt (Achumore)	J. Elliot, Esq.	3	0 9	200 T	70·70	...
Stourhead	Bd. of Northern Lights	...	...	...	48·50	192
D Kinbrace, (H.R.S.)	The Station Agent	5	1 0	...	40·75	194
Scourie	J. Simpson, Esq.	3	0 5	26	42·70	207
D Forsinard (H.R.S.)	The Station Agent	5	1 0	...	47·87	258
Cape Wrath	Bd. of Northern Lights	...	3 6	355 ?	40·11	158
CAITHNESS.						
Wick	The Meteor. Council	8	1 9	77	31·82	223
D† ,, (H.R.S.)	The Station Agent	5	1 0	...	33·94	116
† ,, (Nosshead)	Bd. of Northern Lights	8	4 8	127 ?	32·02	197
D† Watten (H.R.S.)	The Station Agent	5	0 9	75	33·58	239
Thurso (Holburnhead)	Bd. of Northern Lights	3	0 8	60 ?	36·70	168
Dunnethead	,, ,, ,,	...	3 0	...	41·34	155
Pentland Skerries	,, ,, ,,	...	3 3	72 ?	28·63	197
ORKNEY.						
D S. Ronaldshay (Roeberry)	J. Gray, Esq.	5	1 2	101 ⅄	41·01	230
Hoy (Cantickhead)	Bd. of Northern Lights	...	0 6	...	43·70	138
,, (Graemsay Sound, East=High)	,, ,, ,,	...	3 4	27 ?	44·72	218
,, (,, ,, West=Low)	,, ,, ,,	...	3 4	...	42·19	235
D† Pomona (Tankerness Hall)	J. Johnson, Jr., Esq.	5	0 9	12 L	37·97	262
,, (Kirkwall)	Mr. J. W. Cursiter	3	0 6	30	43·22	219
Shapinsay (Balfour Castle)	Col. Balfour	4	0 6	50	37·50	...

DIVISION XIX.—NORTHERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge.			Depth of Rain.	Days on which .01 or more fell.
		Diameter	Height above Ground.	Height above Sea Level	1882	
			ft. in.	feet.	inches.	
ORKNEY—(*con.*)						
D†Pomona (Sandwick)	Rev. C. Clouston, LL.D.	11	2 0	78	38·77	238
Sanda (Start Point)	Bd. of Northern Lights	11	0 6	29 ?	35·48	106
North Ronaldsay	,, ,, ,,	...	3 4	21 ?	39·03	115
SHETLAND.						
Sumburghead	Bd. of Northern Lights	...	...	...	26·72	180
,, (Dunroseness)	The Meteor. Council	8	1 0	84	37·32	263
Bressay Lighthouse	Bd. of Northern Lights	5	0 4	60	38·40	100

IRELAND.

DIVISION XX.—MUNSTER.

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above Sea Level feet.	Depth of Rain. 1882 inches.	Days on which .01 or more fell.
	CORK.							
	Roche's Point	The Meteor. Council	8	1	9	32	52·89	209
D	Cork (Blackrock)	J. B. Binyon, Esq.	10	6	0	30 T	50·18	221
D	,, (Royal Institution)	Dr. Caulfield	10	50	0	70	38·33	192
D	,, (Sunday's Well Road)	W. Miller, Esq.	5	0	9	115 B	42·38	224
	,, (,, ,, ,,)	,, ,, ,,	3	0	9	115 B	46·88	...
D	Glenville	H. Hudson, Esq., M.D.	8	2	0	514 ⅄	55·07	234
D	Fermoy (Gas Works)	Mr. J. Grant	5	1	1	...	39·93	168
	KERRY.							
D	Dromore Castle	R. J. Mahony, Esq.	5	0	6	50 L	70·12	234
	Kenmare (Derreen)	Mr. W. Holbrow	5	1	0	74 T	74·57	239
	Valencia (Telegraph Station)	The Meteor. Council	8	1	0	12	61·78	265
	,, (Observatory)	,, ,, ,,	...	2	0	11	64·49	270
	Killarney	Rev. G. R. Wynne	5	1	0	91 T	56·82	...
	Cara (Lodge)	J. B. Kennedy, Esq.	5	0	4	125	49·04	...
D	Tralee (Castlemorris)	W. H. Deane, Esq., C.E.	5	1	0	25	47·23	241
D	,, (Ardfert Abbey)	G. F. Trench, Esq.	5	3	0	53 T	61·12	209
	WATERFORD.							
	Dunmore (Summerville)	E. A. White, Esq.	5	1	6	140 T	38·87	...
D	Waterford (Brook Lodge)	C. P. Bolton, Esq., C.E.	5	1	0	100 T	46·90	206
	,, (Gas Works)	Mr. Danskin	5	...		...	44·11	...
D	Portlaw (Mayfield)	J. Anderson, Esq.	5	4	0	70	50·47	238
	,, (Curraghmore)	Mr. R. Fairbairn	5	5	0	...	50·59	...
	TIPPERARY.							
D	Cahir (Tubrid)	Rev. H. Palmer	5	1	0	280 T	41·09	226
	Clonmel (Glenam)	Miss Grubb	8	1	4	80 T	46·62	...
	Tipperary (Henry Street)	J. Dowling, Esq., M.D.	5	1	0	400 ?	43·99	229
	Fethard (Mobarnane)	Dr. Donaldson	5	1	2	350	47 83	...
D	Ballina [Killaloe]	J. Digan, Esq.	10	5	0	115	55·75	215
D	Nenagh (The Lodge)	Heber Koe, Esq.	5	1	0	100	36·51	225
	,, (Castle Lough)	A. Parker, Esq.	5	1	3	120 ?	45·12	238
D	Gurteen [Shinrone]	Miss Smith	5	1	0	267 ⅄	38·68	...
	LIMERICK.							
D	Newcastle West	Mr. J. D. Musgrave	5	3	0	219 T	40·91	194
	Jane Ville [Tipperary]	R. Harding, Esq.	5	1	0	534	46·57	...
D	Limerick (Kilcornan)	Mr. G. Smyth	5	1	0	...	38·07	173

DIVISION XX.—MUNSTER—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1882 inches.	Days on which ·01 or more fell.
CLARE.							
D Kilrush	Mr. M. Bourke	5	7	0	61 T	42·74	238
D Ennis	J. Hill, Esq., C·E.	10	3	2	21 L	44·33	223
D Miltown Malbay	M. Molohan, Esq.	5	1	0	350 T	51·59	265
D Corofin	T. G. Mullins, Esq.	5	1	0	...	48·78	202

DIVISION XXI.—LEINSTER.

WEXFORD.							
D New Ross (Longraigue)	J. W. Deane, Esq.	5	1	1	210 T	48·57	206
D Enniscorthy (Ballyhyland)	J. Moffat, Esq.	5	1	0	365 T	54·79	235
Gorey (Courtown House)	RtHon Earl of Courtown	5	3	0	80 T	43·54	197
KILKENNY.							
D Rosbercon Castle [New Ross]	A. E. Graves, Esq.	6	2	6	60 ⅄	43·87	181
D Inistioge (Woodstock)	Lady Louisa Tighe	5	4	6	400 T	49·68	241
Stoneyford (Inisnag)	Rev. J. Graves	5	1	6	220 ⅄	37·17	...
Lavistown	D. A. Milward, Esq.	5	1	0	180	33·68	193
WICKLOW.							
D†Bray (Fassaroe)	R. M. Barrington, Esq.	10	5	0	250	48·79	244
CARLOW.							
St. Mullins [Graigue]	C. Budds, Esq.	5	1	5	29 T	48·69	219
D Bagnalstown (Fenagh House)	D. W. P. Beresford, Esq.	5	0	9	350 T	40·35	250
D Carlow (Browne's Hill)	R. C. Browne, Jun., Esq.	5	1	0	291 ⅄	40·23	232
QUEEN'S COUNTY.							
Abbey Leix (Blandsfort)	J. L. Bland, Esq.	8	3	0	532 ⅄	40·71	236
KING'S COUNTY.							
D Parsonstown (Birr Castle)	Rt. Hon. Earl of Rosse	8	0	7	...	37·69	221
,, (,, ,,)	,, ,, ,,	8	0	11	180	37·32	219
D Portarlington	Dr. Hanlon	5	1	2	240 L	37·25	255
D Rathangan (Clonbrin)	Mrs. W. Gresson	5	1	4	224 T	39·95	170
Tullamore	H. J. B. Kane, Esq., C.E.	10	3	0	235	36·03	230
DUBLIN.							
Dalkey (Bellevue Park)	Mr. J. Kevans	6	1	3	248	27·40	...
Monkstown (Easton Lodge)	Greenwood Pim, Esq.	8	0	8	90	32·46	...
†Dublin (FitzWilliam Square)	Dr. J. W. Moore	5	3	4	54 T	31·18	227
,, (Phœnix Park)	The Meteor. Council	8	1	0	163 ⅄	34·87	236
D Glasnevin (Botanic Gardens)	F. W. Moore, Esq.	8	0	11	65 ⅄	31·57	203
D Balbriggan	Rev. S. P. Warren	5	1	0	57 T	35·81	245
MEATH.							
D Clonee (Williamstown)	W. Johnston, Esq.	5	1	0	200	39·45	244

DIVISION XXI.—LEINSTER—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1882 inches.	Days on which ·01 or more fell.
	MEATH—(*con.*)							
D	Trim	P. Malone, Esq., C.E.	10	4	2	180 T	39·02	164
D	Navan (Balrath)	R.W.Walsh, Esq., C.E.	5	2	0	160	41·26	207
D	Moynalty (Westland)	W. A. Barnes, Esq.	5	1	4	265	45·26	253
	WESTMEATH.							
D	Mullingar (Belvedere)	Mr. J. Baylis	5	1	0	367 T	42·46	189
D	Athlone (Twyford)	J. Hodson, Esq.	5	5	0	188 T	50·58	255
	LOUTH.							
	Stephenstown	Col. Fortescue	5	0	11	75 T	37·79	236
D	Dundalk (Farndreg)	J. Barton, Esq.	5	1	0	90 T	38·36	182
	,, (Ravensdale Park)	Rt. Hon. Lord Clermont	8	1	0	360 T	53·00	202
D	Greenore	T. Chambers, Esq.	5	1	0	4 L	39·60	219
	LONGFORD.							
	Edgworthstown (Currygrane Ho)	J. Wilson, Esq.	8	1	1	265 T	41·16	...

DIVISION XXII.—CONNAUGHT.

	GALWAY.							
D	Shannon Grove [Banagher]	F. A. Waller, Esq.	5	...		...	36·91	196
D	Ballinasloe (Kilconnell)	Rev. H. E. Muriel	5	2	6	320 T	46·30	239
D	,,	W. H. Kempster, Esq.	5	0	6	150 T	41·74	255
D	,, (Garbally)	Mr. J. Cobban	8	1	0	157 T	47·60	249
D	Ahascragh (Clonbrock)	Rt. Hon. Lord Clonbrock	10	5	8	200 T	45·80	...
D	Clifden (Kylemore)	Mr. J. Maxwell	5	1	0	105 T	86·47	224
	Tuam (Gardenfield)	H. Kirwan, Esq.	5	1	0	155 T	50 22	...
	,, (,,) ... *Snowdon*	,, ,, ,,	5	6	0	160 T	48·38	...
	MAYO.							
	Ballinrobe (Creagh)	Mrs. Knox	5	1	0	80	55·85	...
	,, (Kilrush)	J. Simson, Esq.	5	1	0	120 T	50·26	...
	Westport (Oldhead House)	H. Wilbraham, Esq.	3	3	0	100 T	57·60	...
D	Crossmolina (Enniscoe)	J. Pratt, Esq.	5	0	11	50 ?	57·82	240
	SLIGO.							
	Collooney (Markree Observatory)	Mrs. E. Salles	5	0	6	110 T	47·98	...
	,, (,, ,,)	,, ,,	31	16	7	148 T	34·21	244
D	Sligo (Mount Shannon)	F. M. Olpherts, Esq.	5	4	5	70 B	46·38	238
	Mullaghmore	The Meteor. Council	8	1	2	40	47·19	263
	LEITRIM.							
D	Carrick-on-Shannon	R.Bradshaw, Esq., M.D.	5	1	0	150 ?	39·74	214

DIVISION XXIII.—ULSTER.

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
CAVAN.						
D Killeshandra (Drummany)	H.M.Anketell Jones Esq	10	32 6	292 ⅄	38·28	227
D Belturbet (Red Hills)	Rev. E. B.W. Venables	5	0 9	208 ⅄	42·51	241
D Lough Allen (Dowra)	W. Howe, Esq.	5	1 6	234 L	43·65	253
FERMANAGH.						
Enniskillen (Florence Court) ...	Earl of Enniskillen FRS	8	1 9	250 T	48·08	227
,, (Lisbellaw)	R. Eadie, Esq.....	5	1 0	200 ?	37·28	213
,, (,,) *monthly*	,, ,, ...	5	1 0	200 ?	39·45	...
Brookboro' (Colebrook Park) ...	The Meteor. Council ...	...	1 0	240	46·34	232
MONAGHAN.						
D Rockcorry	Mr. W. R. Loudon ...	5	1 0	290 ⅄	45·70	219
ARMAGH.						
Flurrybridge	Rt. Hon. Lord Clermont	8	1 0	340 ⅄	49·38	204
D Edward St. Station [Newry] ...	J. L. D. Meares, Esq...	5	1 0	22 ⅄	44·23	158
D Armagh Observatory.....	Dr. Dreyer	10	1 7	208 ⅄	37·82	247
,, ,, ...	The Met. Council	...	2 0	204	39·63	244
D Lurgan (Belle Vue)	F. W. Bell, Esq.	5	0 2	200 T	39·22	261
DOWN.						
D Kilkeel	Rev. E. O'Brien Pratt	5	1 6	40	38·68	216
D Warrenpoint (Summer Hill).....	Mr. B. M. Kernan.....	5	1 0	30 L	53·13	163
Newcastle (Fairleigh)	Rev. J. H. Seymour ...	5	1 5	12	59·25	229
D Rathfryland (Ballynagappoge)...	J.Smyth,jun. Esq.,C.E.	5	3 3	300	41·40	164
D Castlewellan (Lough Island) ...	,, ,, ,, ...	10	3 0	442 T	51·80	129
D† ,, (Bann Res.).....	,, ,, ,, ...	8	1 0	440 T	53·20	129
D Rathfryland	B. B. Meek, Esq.	5	1 0	500	40·33	145
Banbridge (Katesbridge)	A. Mulligan, Esq.	5	1 0	230	37·64	...
D Seaforde	Col. Forde	8	0 5	180 ⅄	42·83	207
D Banbridge (Corbet Reservoir) ...	J.Smyth, jun.,Esq.C.E.	10	3 0	234 T	43·00	171
D† ,, (Milltown)	,, ,, ,,	8	0 8	200 T	37·48	228
D† Waringstown.....	Major Waring	8	0 8	191 ⅄	39·55	225
D Newtownards.....	Mr. W. Craig	5	1 7	10	35·28	148
D Sydenham (Alma House).....	R. Reade, Esq.	5	1 0	60	45·39	244
Donaghadee	The Meteor. Council ...	8	1 6	30	34·59	217
ANTRIM.						
D Aghalee [Lurgan].....	Lancelot Turtle, Esq...	5	1 0	105 ⅄	39·59	219
D† Belfast (Queen's College).....	Mr. W. Taylor	11	7 4	68 ⅄	39·32	188
D ,, (New Barnsley)	J. Firth, Esq.....	5	1 0	200 T	50·45	234
D Ballymena (Harryville)	A. Dawson, Esq.	5	1 0	150 T	46·93	270
Brougshane (Quolie).....	J. Lanyon, Esq., C.E...	5	1 1	800 L	57·60	206
D Bushmills	Mr. D. Elliott	5	1 0	33 T	45·23	236
,, (Dundarave).....	Sir F.E. Macnaghten, Bt	5	1 3	162 T	47·15	241

DIVISION XXIII.—ULSTER—(*continued*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above SeaLevel	Depth of Rain. 1882	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
LONDONDERRY.						
D Dungiven	J. M. Moore, Esq., M.D.	5	1 0	290	50·42	248
D Londonderry (Knockan)	Rev. H. F. Stevenson..	5	1 0	300	52·31	256
D *Garvagh (Moneydig)	Miss Morrison	5	1 0	121 T	45·77	221
D Londonderry (Clooney Terrace)..	Mr. J. Conroy	5	1 0	94 T	48·90	264
,, (Creggan Res.)	Mr. J. Hutchinson	8	1 0	320 T	50·08	270
D Limavady	C. D. H. Campbell, Esq.	5	4 0	81 T	41·88	269
D ,, (Drenagh)	C. T. McCausland, Esq	5	1 0	80	44·24	263
D Bellarena	Sir F. W. Heygate, Bt.	5	1 0	12 T	45·25	249
Coleraine	A. D. Williamson, Esq.	5	1 4	25 T	47·25	200
D ,,	C. D. H. Campbell, Esq.	5	1 0	166 T	44·09	275
TYRONE.						
D Aughnacloy Archdeaconry	Rev. T. G. Stokes	5	4 6	254 T	40·41	182
Moy (Derrygally)	W. M. Bond, Esq.	5	5 6	60	37·79	192
,, (,,)	,, ,, ,,	10	5 0	60	36·74	192
D Stewartstown (The Square)	A. Johnston, Esq.	5	1 4	300 T	42·61	216
D Dungannon (Rockdale)	Lt.-Col. Lowry	5	1 0	300 T	47·39	257
D Stewartstown (Ardtrea Rectory)	Rev. W. E. Meade, D.D.	5	1 0	191 T	43·35	232
D Omagh (Edenfel)	Col. Buchanan	8	1 0	280 T	45·78	255
DONEGAL.						
Inver	Rev. F. Carre	5	1 0	100	47·59	...
D Donegal (Revelin House)	Rev. S. R. Craig	5	2 0	20 B	49·51	260
Castlefinn (Finn Lodge)	Sir F. W. Heygate, Bt.	5	1 0	57	?41·81	209
Raphoe (Convoy Ho.)	Col. Montgomery	5	1 0	110 T	55·14	264
D Ramelton	J. A. Mahony, Esq.	5	1 2	21	49·54	254
P ,, (Killygarvan)	C. H. Cochrane, Esq	5	0 10	11 L	51·58	258
D Buncrana (Rockfort)	T. Colquhoun, Esq.	5	1 0	15	48·57	243
D Dunfanaghy	J. A. Sterritt, Esq.	5	1 0	11 L	50·48	242
D Moville	Mr. J. Lowry	8	1 6	78 L	54·36	266
D Carndonagh	Rev. A. Pinkerton	5	1 0	255 T	50·91	249

G. J. S.

SUPPLEMENTAL TABLE OF IMPERFECT RETURNS,

AND OF THOSE WHICH, FOR VARIOUS REASONS, ARE NOT INSERTED IN THE GENERAL TABLES.

DIV.	COUNTY.	STATION.	OBSERVER.	RAIN GAUGE. Diameter.	Height above Ground.	Height Above Sea Level.	Depth of Rain. 1882.
				in.	ft. in.	feet.	in.
II.	Kent	Acrise (Orchard Villa)	C. Woollett, Esq.	8	1 0	484↑	39·2
		,, (White Gate Farm)		8	1 0	504↑	
III.	Hunts	Huntingdon (Wistow)	Rev. T. Woodruff	5	1 4	...	28·7
,,	Bedford	Woburn (Hulcote Rectory)	Rev. B. C. Smith	5	1 0	310T	29·4
VII.	Derby	Belper (Field Head House)	J. Hunter, jun., Esq., C.E.	8	0 8	355↑	42·9
,,	,,	,, (Matlock Road)		8	0 8	225↑	
IX.	Yorkshire	Bradford (Thornton Moor)	A. R. Binnie, Esq., C.E.	5	1 0	1176↑	45·8
,,	,,	Skipton (Thorpe Fell, Barden)	,, ,, ,,	5	1 0	1661↑	54·0
,,	,,	,, (Sandbed Beck, Burnsall)	,, ,, ,,	5	1 0	676↑	50·3
,,	,,	Settle	T. Green, Esq.	5	0 10	483	59·1
,,	,,	Bowes	G. J. Symons, Esq., F.R.S.	8	1 0	960T	42·5
,,	,,	Lune Head [Brough]	,, ,, ,,	8	1 3	1779T	41·2
X.	Cumberland	Rosthwaite (Castle Lodge)	,, ,, ,,	8	1 0	305T	109·4
,,	Westmoreland	Ulleswater (Swarth Fell)	,, ,, ,,	8	1 0	1000T	56·0
XI.	Merioneth	Aberdovey	Dr. Grosholz	5	3 6	50B	51·4
XIII.	Edinburgh	Pentland Hills (Loganlea)	W. H. Cameron, Esq.	11	0 6	850	56·6
XV.	Argyll	Oban (Craigvarren)	G. W. Brenan, Esq.	12	1 0	140T	59·3
,,	,,	Ballachulish	D. Campbell, Esq., M.D.	5	0 8	45	89·2
XVI.	Perth	Callander (Leny)	J. B. Hamilton, Esq.	3	0 4	345↑	77·8
XIX.	Sutherland	Kinbrace (Achintoul)	Mr. W. Stewart	5	1 0	440T	39·7
XX.	Cork	Queenstown (Altavilla)	D. Scott, Esq., M.D.	32	15 0	140	43·8
XXIII.	Donegal	Ramelton (Ballyare)	G. M. W. Hill, Esq.	5	1 0	80T	41·4

SUGGESTIONS FOR SECURING UNIFORMITY OF PRACTICE AMONG RAINFALL OBSERVERS.

I.—SITE.—A rain gauge should not be set on a slope or terrace, but on a level piece of ground, at a distance from shrubs, trees, walls, and buildings—at the very least, as many feet from their base as they are in height. Tall-growing flowers, vegetables, and bushes must be kept away from the gauge. If a thoroughly clear site cannot be obtained, shelter is most endurable from N.W., N., and E., less so from S., S.E., and W., and not at all from S.W. or N.E.

II.—OLD GAUGES.—Old established gauges should not be moved, nor their registration discontinued until, at least, two years after a new one has been in operation, otherwise the continuity of the register will be irreparably destroyed. Both the old and the new ones must be registered at the same time, and the results recorded for comparison.

III.—LEVEL AND FIXING.—The funnel of a rain gauge must be set quite level, and so firmly fixed that it will remain so in spite of any gale of wind or ordinary circumstance. Its correctness in this respect should be tested from time to time.

IV.—HEIGHT.—The funnels of gauges newly placed should be 1 ft. above grass. Information respecting height above sea level may be obtained from the Editor.

V.—RUST.—If the funnel of a japanned gauge becomes so oxidised as to retain the rain in its pores, or threatens to become rusty, it should have a coat of gas tar, or japan black, or a fresh funnel of zinc or copper should be provided.

VI.—FLOAT GAUGES.—If the measuring rod is detached from the float, it should never be left in the gauge. If it is attached to the float, it should be pegged or tied down, and only allowed to rise to its proper position at the time of reading. To allow for the weight of the float and rod, these gauges are generally so constructed as to show 0 only when a small amount of water is left in them. Care must always be taken to set the rod to the zero or 0.

VII.—CAN AND BOTTLE GAUGES.—The measuring glass should always be held upright; the reading is to be taken midway between the two apparent surfaces of the water.

VIII.—TIME OF READING.—Nine a.m. daily; if taken only monthly, then 9 a.m. on the 1st.

IX.—Date of Entry.—The amount measured at 9 a.m. on any day is to be set against the previous one; because the amount registered at 9 a.m. of, say, 17th contains the fall during 15 hours of the 16th, and only 9 hours of the 17th. (*This rule has been approved by the Meteorological Societies of England and Scotland, cannot be altered, and is particularly recommended to the notice of observers.*)

X.—Mode of Entry.—If less than one-tenth (·10) has fallen, the cypher must *always* be prefixed; thus, if the measure is full up to the seventh line, it must be entered as ·07, that is, no inches, no tenths, and seven hundredths. For the sake of clearness, it has been found necessary to lay down an invariable rule, that there shall always be two figures to the right of the decimal point. If there be only one figure, as in the case of one-tenth of an inch (usually written ·1) a cypher must be added, making it ·10. Neglect of this rule causes much inconvenience. All columns should be cast *twice*—once up and once down, so as to avoid the same error being made twice. When there is no rain, a line should be drawn rather than cyphers inserted.

XI.—Caution.—The amount should always be written down before the water is thrown away.

XII.—Small Quantities.—The unit of measurement being ·01, observers whose gauges are sufficiently delicate to show less than that, are, if the amount is under ·005, to throw it away, if it is ·005 to ·010 inclusive, they are to enter it as ·01.

XIII.—Absence.—Every observer should train some one as an assistant; but where this is not possible, instructions should be given that the gauge be emptied at 9 a.m. on the 1st of the month, and the water bottled, labelled, and tightly corked, to await the observer's return.

XIV.—Heavy Rains.—When very heavy rains occur, it is desirable to measure immediately on their termination, and it will be found a safe plan after measuring to return the water to the gauge, so that the morning registration will not be interfered with. Of course if there is the slightest doubt as to the gauge holding all that falls, it must be emptied, the amount being *previously* written down.

XV.—Snow.—In snow three methods may be adopted—it is well to try them all. (1) Melt what is caught in the funnel by adding to the snow a previously ascertained quantity of warm water, and then, deducting this quantity from the total measurement, enter the residue as rain. (2) Select a place where the snow has not drifted, invert

the funnel, and turning it round, lift and melt what is enclosed. (3) Measure with a rule the average depth of snow, and take one-twelfth as the equivalent of water. This being a very rough method, is not to be adopted if it can be avoided. Some observers use in snowy weather a cylinder of the same diameter as the rain gauge, and of considerable depth. If the wind is rough, all the snow is blown out of a flat-funnelled rain gauge. Snowdon pattern gauges are much the best.

XVI.—Overflow.—It would seem needless to caution observers on this head, but as not a year passes in which some of our observers do not allow it to happen, it is necessary to call attention to the fact that there does not seem to be any part of the British Isles where 4 inches may not fall in 24 hours. Therefore it is not desirable to purchase any new gauge of which the capacity is less than 4 inches.

XVII.—Second Gauges.—It is desirable that observers should have two gauges, and that one of them should be capable of holding 8 inches of rain. One of the gauges should be registered daily, the other weekly or monthly as preferred, but always on the 1st of each month. By this means a thorough check is kept on accidental errors in the entries, which is not the case if *both* are read daily.

XVIII.—Dew and Fog.—Small amounts of water are at times deposited in rain gauges by fog and dew; they should be added to the amount of rainfall, because (1) they "tend to water the earth and nourish the streams; and not for that reason only, but (2) because in many cases the rain gauges can only be visited monthly, and it would then obviously be impossible to separate the yield of snow, rain, &c; therefore, for the sake of uniformity, all must be taken together, and as except by watching all night it is never possible to be certain that small amounts are wholly dew, it is best to count all entries of ·01 in. or upwards as days with rain.

XIX.—Doubtful Entries.—Whenever there is the least doubt respecting the accuracy of any observation, the entry should be marked with a ?, and the reason stated for its being placed there.

XX.—Breakage.—The Editor has no desire to supply rain gauges or glasses, or in any way to undertake, or interfere with, that which is the business of Opticians; but the continuity and permanent accuracy of the records of his correspondents is to him of such importance, that he deems it advisable to announce that any assistance in his power is always at their service.